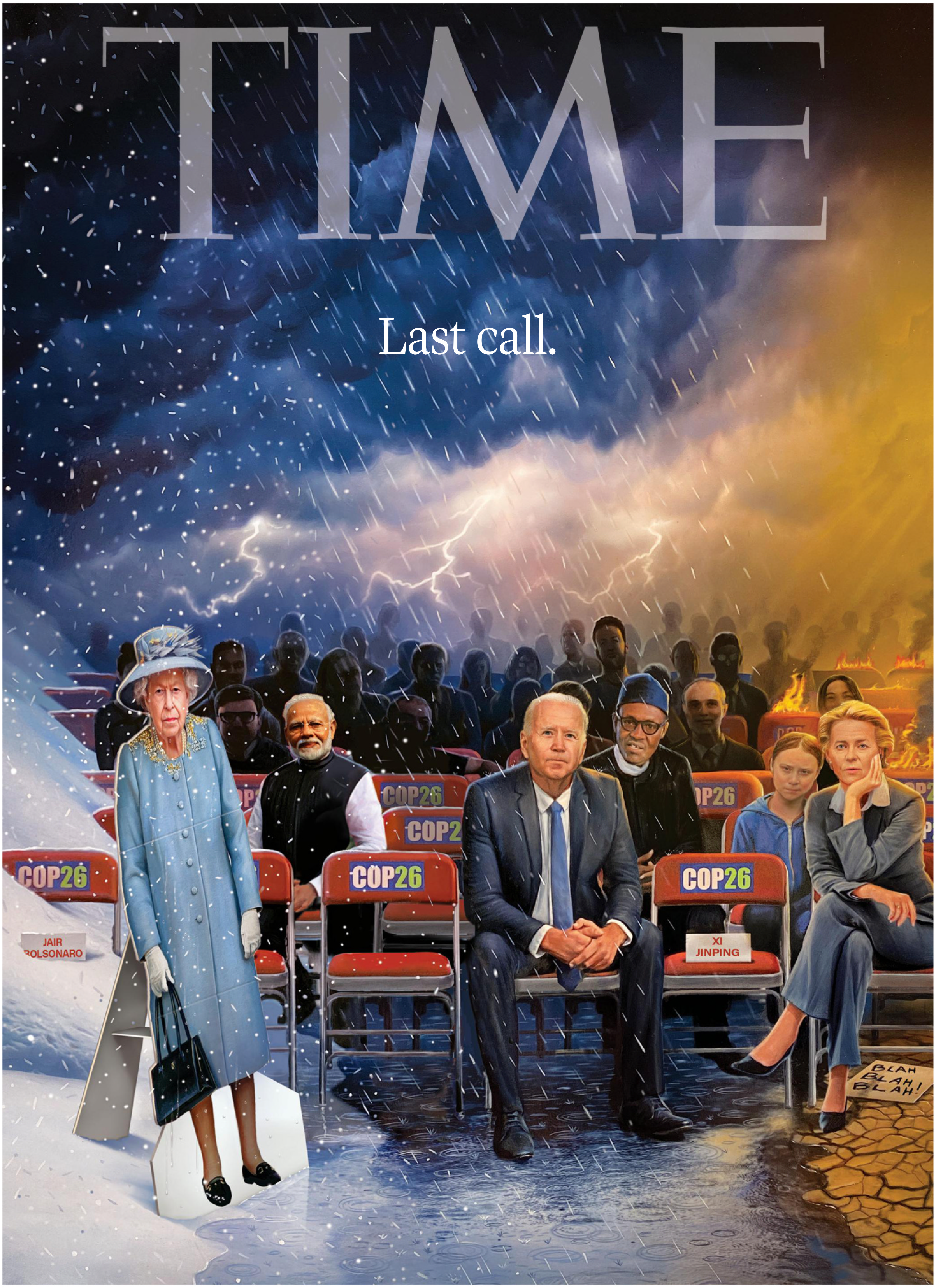
DOUBLE ISSUE

NOV. 8 / NOV. 15, 2021

TIME

Last call.

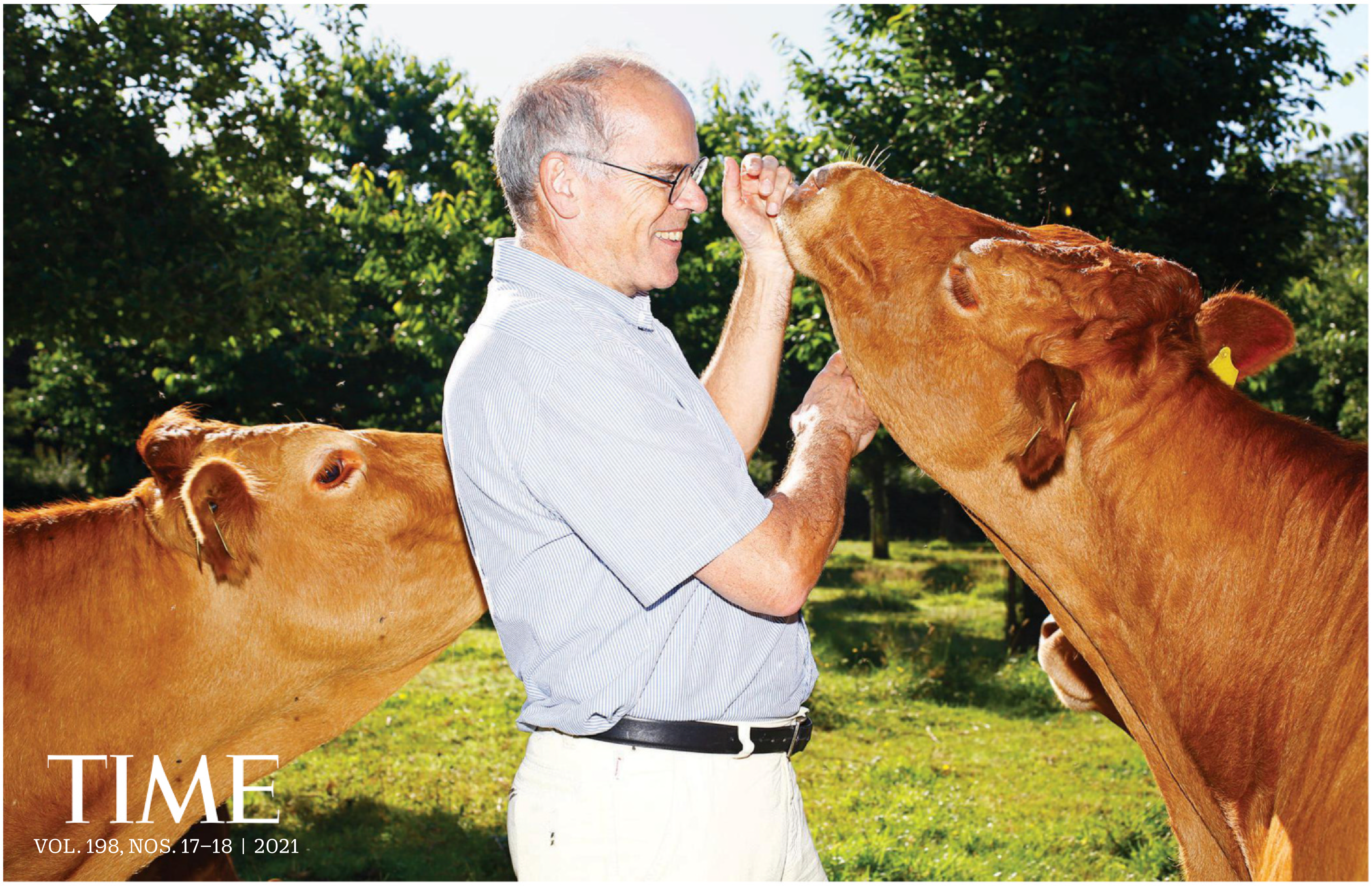

COP26
JAIR BOLSONARO
XI JINPING
BLAH BLAH BLAH!

time.com

VISIT…

LANZAROTE

Caliente.COM



^

Mark Post, who developed the first lab-grown hamburger at Mosa Meat, visits Limousin cows near Maastricht, Netherlands, in July

Photograph by Ricardo Cases for TIME

TIME
VOL. 198, NOS. 17–18 | 2021

4 | From the Editor
6 | Conversation
8 | For the Record

The Brief

News from the U.S. and around the world

9 | Tardily **on the trail** of the coronavirus's origin

12 | **Facebook**'s European problem

14 | **Cognitive tests** for public service

15 | **Milestones:** illustrator Jerry Pinkney; actor James Michael Tyler

16 | Risking **women's education** in Afghanistan

17 | **Disarming** Hollywood

20 | **Migrants'** perilous trek

The View

Ideas, opinion, innovations

23 | Belinda Luscombe on a wave of **rudeness**

25 | Ian Bremmer on the **Iran deal**

26 | S. Mitra Kalita on **Indra Nooyi**'s secret sauce

27 | Marc Benioff on learning from **Colin Powell**

28 | **Emily Ratajkowski** on relinquishing control

Features

The CEO Whisperer
Jeffrey Sonnenfeld gets business titans to stand for more than profits
By Molly Ball **32**

The Big Quit
Young people leaving the workforce have other plans
By Raisa Bruner **40**

Overlooked
What it means that America ignores imprisoned activist H. Rap Brown
By Rembert Browne **44**

Special Report: Climate Is Everything
John Kerry and eight others to watch *By Justin Worland* **52** Meat off the hoof *By Aryn Baker* **66** The world's other "lung" *By Vanessa Nakate* **74** Green swans *By Emily Barone* **78** Energy for all in Australia *By Amy Gunia* **80**

Time Off

What to watch, read, see and do

89 | The abiding cipher of **Diana** on stage, screen and tube

92 | Television: a guy rom-com in ***Love Life;*** Kaepernick's ***Colin in Black and White;*** the rare pleasures of ***Dickinson***

94 | Books: Darcie Little Badger talks about ***A Snake Falls to Earth***

96 | 7 Questions for marine biologist **Sylvia Earle**

For customer service and our general terms and conditions, visit ***timeeurope.com/customerservice,*** or call +44 1858 438 830 or write to TIME, Tower House, Lathkill Street, Market Harborough, LE16 9EF, United Kingdom. In South Africa, write to Private Bag 1, Centurion 0046. **PRINT SUBSCRIPTIONS:** Visit ***time.com/joinus38.*** **REPRINTS AND PERMISSIONS:** Visit ***time.com/reprints.*** For custom reprints, visit ***timereprints.com.*** **ADVERTISING** For advertising rates and our editorial calendar, visit ***timemediakit.com.*** TIME is published biweekly (except for August and December) by Time Magazine UK Ltd, Suite 1, 3rd Floor, 11-12 St James's Square, London, SW1Y 4LB. TIME is printed in the Netherlands and the U.K. Le Directeur de la Publication: Mike Taylor. C.P.P.A.P No. 0122 C 84715. Editeur responsable pour la Belgique: André Verwilghen, Avenue Louise 176, 1050 Bruxelles. EMD Aps, Gydebang 39-41, DK-3450 Allerod. Rapp. Italia: I.M.D.s.r.l., via Guido da Velate, 11 – 20162 Milano; aut. Trib. MI N. 491 del 17/9/86, poste Italiane SpA - Sped. in Abb. Post. DL. 353/2003 (conv. L. 27/02/2004 -n. 46) art. 1 comma 1, DCB Milano, Dir. Resp.: Tassinari Domenico. Periodicals postage paid at New York, N.Y., and at additional mailing houses. Additional pages of regional editions numbered or allowed for as follows: National S1-S2.
Vol. 198, Nos. 17–18 © 2021 TIME Magazine U.K. Ltd. All rights reserved. Reproduction in whole or in part without written permission is prohibited. TIME and the Red Border Design are protected through trademark registration in the U.S. and in the foreign countries where TIME magazine circulates. ISSN 0928-8430.

Elegance is an attitude
Regé-Jean Page
LONGINES
The Longines
Master Collection

From the Editor

Signs of progress

The global response to climate change is now the underlying framework for everything else that society debates

IN 1989, WHEN *TIME* CHOSE THE ENDANGERED Earth as Planet of the Year, in lieu of the usual Person of the Year, the critics pounced. The article itself quoted a University of California scientist who called the greenhouse effect "the laugh of the century." One reader wrote that the contents of the article "are an excellent example of the solid waste problem." The skeptics piled in again 30 years later, when I opened a 2019 special climate issue commemorating the Endangered Earth by simply stating that the scientific fact of global warming is settled and that there isn't another side.

Today, as 20,000 delegates from 196 countries head to Glasgow for the most important global gathering on climate change in years, it's easy to be cynical about the world's commitment to addressing its existential crisis. President Xi Jinping of China, which recently announced plans for 43 new coal-fired power plants, as well as leaders of some nations that have shown the most hesitancy for change, including Brazil, Mexico and Russia, are skipping the conference. Global emissions levels, after seeing rare declines during the pandemic, are on the rise again. Many of the promises made at COP21 in Paris, the last major global climate summit, have been broken.

And yet there has been considerable progress over the past couple of years. Before COP21 in 2015, the world was on track to be more than 4°C hotter by the end of this century than at the dawn of the industrial era; that number has since come down to just under 3°C—still twice what is sustainable, but real progress. And there is, more than ever, a shared understanding of the reality we face. More than 99.9% of peer-reviewed scientific papers attribute climate change primarily to humans, according to a new Cornell University review of nearly 90,000 studies. After a year of unprecedented droughts, fires, floods and storms, climate change has emerged as the dominant issue of our time. You can see it in the resolute shift in investor priorities toward a carbon-free future; in the deluge of money into much-needed innovation toward clean energy and carbon sequestration; and increasingly in the policy discussions of the world's biggest economies. "Climate change seems finally to be taking the central role in public discourse that it should have been holding for decades," says science editorial director Elijah Wolfson, who oversaw this issue. "The global response to climate change is now the underlying framework for everything else that society debates."

ON THE COVERS:

Illustration by Tim O'Brien for TIME

TIME
THE DIPLOMAT

Photograph by Peter Hapak for TIME

TIME
THE ACTIVIST

Photograph by Mustafah Abdulaziz for TIME

TIME
THE INNOVATOR

Photograph by Jingyu Lin for TIME

THE FOUR COVERS for our editions around the globe capture different pathways we must take to make further progress. John Kerry, profiled by Justin Worland, is undertaking a late-career act as Joe Biden's climate czar to return the U.S. to global leadership in these efforts. Linda Zhang, the Ford engineer who has electrified the most popular truck in America, shows the promise of technological innovation. Vanessa Nakate, the 24-year-old Ugandan climate activist, calls for listening to the voices of others like her. And the painter Tim O'Brien, who has illustrated more TIME covers than any artist in recent history, highlights the importance of global collaboration at COP26 itself. "Nothing globally is more urgent than nations dealing with climate change," says O'Brien, who notes that he added the empty chairs to reflect what is not being done. "The uninvited guest is how we all should see climate change, that it will drastically alter our comfort and future if not addressed."

Edward Felsenthal,
EDITOR-IN-CHIEF & CEO
@EFELSENTHAL

Blackmagicdesign
MOBILE APP FOR TRADERS
Preview
Program
Camera 1
Pres 1
Camera 2
Sales
REC
00:03:18
ON AIR
00:03:18
4.62
26%
YouTube
1.490.00
ATEM Software Control
ATEM Mini Pro

Introducing ATEM Mini Pro

The compact television studio that lets you create presentation videos and live streams!

Blackmagic Design is a leader in video for the television industry, and now you can create your own streaming videos with ATEM Mini. Simply connect HDMI cameras, computers or even microphones. Then push the buttons on the panel to switch video sources just like a professional broadcaster! You can even add titles, picture in picture overlays and mix audio! Then live stream to Zoom, Skype or YouTube!

Create Training and Educational Videos

ATEM Mini's includes everything you need. All the buttons are positioned on the front panel so it's very easy to learn. There are 4 HDMI video inputs for connecting cameras and computers, plus a USB output that looks like a webcam so you can connect to Zoom or Skype. ATEM Software Control for Mac and PC is also included, which allows access to more advanced "broadcast" features!

Use Professional Video Effects

ATEM Mini is really a professional broadcast switcher used by television stations. This means it has professional effects such as a DVE for picture in picture effects commonly used for commentating over a computer slide show. There are titles for presenter names, wipe effects for transitioning between sources and a green screen keyer for replacing backgrounds with graphics.

Live Stream Training and Conferences

The ATEM Mini Pro model has a built in hardware streaming engine for live streaming via its ethernet connection. This means you can live stream to YouTube, Facebook and Teams in much better quality and with perfectly smooth motion. You can even connect a hard disk or flash storage to the USB connection and record your stream for upload later!

Monitor all Video Inputs!

With so many cameras, computers and effects, things can get busy fast! The ATEM Mini Pro model features a "multiview" that lets you see all cameras, titles and program, plus streaming and recording status all on a single TV or monitor. There are even tally indicators to show when a camera is on air! Only ATEM Mini is a true professional television studio in a small compact design!

ATEM Mini	**US$295**
ATEM Mini Pro	**US$495**
ATEM Mini Pro ISO	**US$795**

Learn more at www.blackmagicdesign.com

Blackmagicdesign

Conversation

TIME
Delete "Facebook"?
Cancel
Delete

WHAT YOU SAID ABOUT ...

DELETE "FACEBOOK"? After reading Billy Perrigo and Roger McNamee's features in the Oct. 25/Nov. 1 issue, which addressed fallout following the most significant leak of internal research in Facebook's 17-year history, readers shared their frustrations with the social network—and social media in general. "When sustained, resounding global success is achieved by a single company, we may find ourselves at the 'mercy of' the morality of its leadership," wrote Alan Fedeli of Ringwood, N.J. Sara Bledsoe of Sterling, Colo., called Facebook whistle-blower Frances Haugen "heroic," but worried about consequences she might face for revealing her identity. "She needs our collective prayers for ongoing protection from the harassments she will surely endure for speaking out," she wrote.

> *'People have to realize that their data is worth a ton of $$$.'*
>
> @TRAVISHB, on Twitter

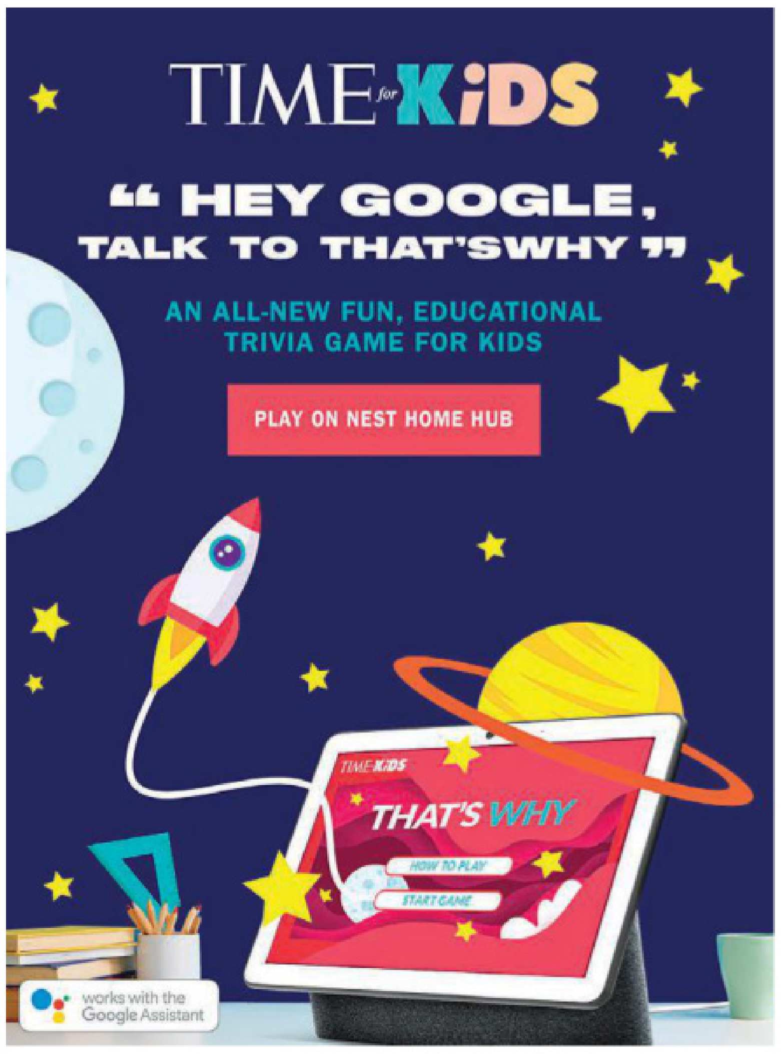
Citing "constant privacy invasions" like robocalls, junk mail and phishing, William S. Rodgers of Brentwood, Tenn., argued that Big Tech has become too intrusive and needs federal oversight, "which Congress seems unable or unwilling to effectively address." On the other hand, Enrique Puertos of Cleveland, Ga., called for more grassroots activism, writing that "the real drivers of change will have to be the conscientious users of these platforms." And Ella Barry of Arcata, Calif., shared an example of such change: "I cancelled Facebook many years ago," Barry wrote. "I am here to tell you that you really can live without it."

> *'We need a reset of corporate moral values. Public good matters.'*
>
> @CELINEGOUNDER, on Twitter

Quiz time

A fan of family trivia night and a Google Home product owner? TIME for Kids has produced *That'sWhy,* a trivia game hosted on Google Nest Home Hub devices that features multiple-choice questions across categories including science, history, sports and space—like "Why is Mars red?" Is it because **a)** the planet is very hot, **b)** the planet reflects the sun or **c)** the planet has soil made of rust?

To play, say "Hey Google, talk to *That'sWhy.*" (The correct answer is **c.**)


TIME for KiDS
"HEY GOOGLE, TALK TO THAT'SWHY"
AN ALL-NEW FUN, EDUCATIONAL TRIVIA GAME FOR KIDS
PLAY ON NEST HOME HUB
TIME KiDS
THAT'S WHY
HOW TO PLAY
START GAME
works with the Google Assistant

FUTURE OF WORK A new collaboration with Charter serves to expand the scope of TIME's business coverage, focused on corporate leadership and the modern workplace. Veteran business journalist S. Mitra Kalita will contribute a regular column as part of the partnership; on **page 26** read her take on former PepsiCo CEO Indra Nooyi's new memoir.

charter
TIME

bonus TIME history

Subscribe to TIME's free history newsletter and get **the stories behind the news, plus a curated selection of highlights from our archives.** For more, visit **time.com/email**

SETTING THE RECORD STRAIGHT ▸ In the Oct. 25/Nov. 1 issue, we misstated a detail about Next Generation Leader Chika Stacy Oriuwa's professional life. She is the only Black resident in her training cohort, not in her department.

TALK TO US

SEND AN EMAIL:	FOLLOW US:
letters@time.com Please do not send attachments	**facebook.com/time** **@time** (Twitter and Instagram)

Letters should include the writer's full name, address and home telephone, and may be edited for purposes of clarity and space

Back Issues Contact us at customerservice@time.com, or call 800-843-8463. **Reprints and Permissions** Information is available at time.com/reprints. To request custom reprints, visit timereprints.com. **Advertising** For advertising rates and our editorial calendar, visit timemediakit.com. **Syndication** For international licensing and syndication requests, contact syndication@time.com

Please recycle this magazine, and remove inserts or samples beforehand

FUTURE OF WORK: CHARTER

CHEMISTRY THAT MATTERS™

سابك
sabic

COLLABORATION.
THE COOLEST WAY
TO CREATE ENERGY.

Highly efficient solar farms are cooled by water and SABIC energy partnerships.

In collaboration with renewable energy companies, we're helping build solar fields on lakes. The panels float on barrels made from SABIC materials, enabling the panels to stay cool to generate energy more efficiently without overheating or using valuable land resource. Solar collaborations are cooler with Chemistry that Matters™.

Meet one of the world's leading chemical companies at SABIC.com/collaboration

For the Record

‘Female astronauts may be in better condition after putting on makeup.’

PANG ZHIHAO,
a China National Space Administration official, in Oct. 17 remarks confirming that cosmetics were sent into space for Colonel Wang Yaping

‘Having my records expunged will mean something to my grandchildren and great-grandchildren.’

CLAUDETTE COLVIN,
civil rights activist, in a sworn Oct. 27 statement asking that the record of her 1955 arrest—for refusing to give up her seat on a segregated bus—be cleared

‘EVERY DAY THE COURT FAILS TO GRANT RELIEF IS DEVASTATING.’

SONIA SOTOMAYOR,
U.S. Supreme Court Justice, in her dissent to the court’s Oct. 22 decision to keep Texas’ six-week abortion ban in place until it rules on the legality of its controversial enforcement structure

‘The word *victim* is a loaded, loaded word.’

JUDGE BRUCE SCHROEDER,
ruling on Oct. 25 that attorneys could refer to people shot by Kyle Rittenhouse in Kenosha, Wis., last year as “looters” and “arsonists” but not as “victims” during Rittenhouse’s murder trial

‘I acknowledge that there are various opinions about our marriage.’

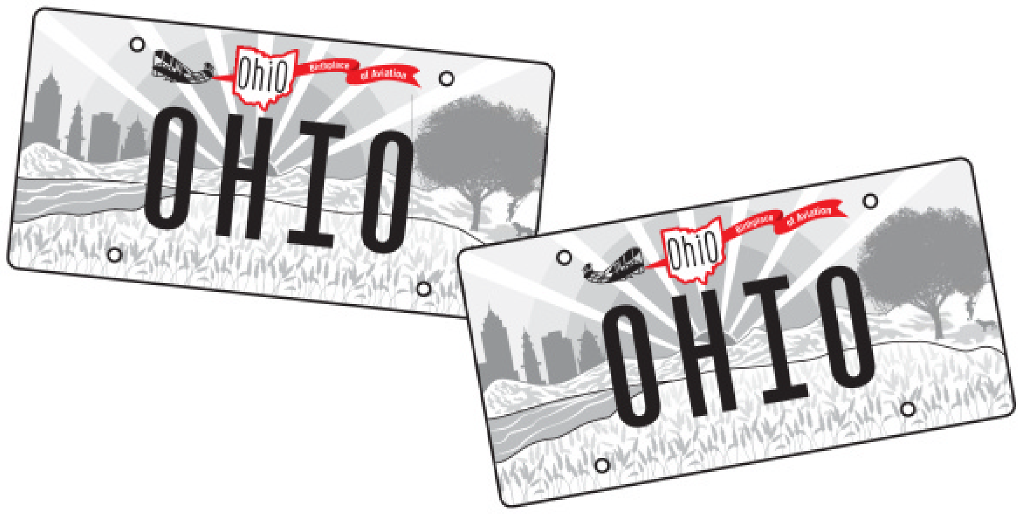
PRINCESS MAKO,
in prepared remarks on Oct. 26 as she married commoner Kei Komuro in Tokyo, forfeiting her royal titles

1021 A.D.

Year to which scientists have radiocarbon-dated a **Viking settlement in Newfoundland, Canada**—indicating the presence of Europeans in the Americas more than four centuries before Columbus—according to a study published Oct. 20

35,000

Number of **newly designed Ohio license plates** that will be recycled after it was revealed on Oct. 21 that the plane on the plate—paying homage to Dayton natives Orville and Wilbur Wright—is pictured pushing a banner



GOOD NEWS
of the week

On Oct. 27, the U.S. government announced it had issued its **first passport with an “X” gender marker,** in a historic move for the rights of nonbinary, intersex and gender-nonconforming people

ILLUSTRATIONS BY BROWN BIRD DESIGN FOR TIME

SOURCES: THE NEW YORK TIMES, AP, WASHINGTON POST, NPR, NATURE

The Brief

ORIGIN STORY
Cells infected by the SARS-CoV-2 virus, shown in a colorized image taken from a patient sample

INSIDE

"COGNITIVE TESTS" FOR SENIOR U.S. LAWMAKERS

BARRED FROM CAMPUS, AFGHAN WOMEN LEARN ONLINE

CAN A FATAL SHOOTING CHANGE HOLLYWOOD'S GUN RULES?

The Brief is reported by Jasmine Aguilera, Emma Barker, Emily Barone, Eloise Barry, Madeleine Carlisle, Alejandro de la Garza, Tara Law, Sanya Mansoor, Ciara Nugent, Billy Perrigo, Lon Tweeten and Olivia B. Waxman

HEALTH

A new push for COVID-19's roots

By Jamie Ducharme

ALMOST TWO YEARS INTO the COVID-19 pandemic, as booster shots roll out and this summer's Delta-related surge subsides in the U.S., it's still not clear exactly how, where or when SARS-CoV-2 began infecting people. Many experts believe the virus jumped from animal hosts to humans, but researchers continue to investigate the possibility that it escaped from a laboratory.

The chances of figuring out which, if either, of those theories is correct grow slimmer as time passes. But on Oct. 13, the World Health Organization (WHO) revealed a new effort to capitalize on what time remains: the Scientific Advisory Group for the Origins of Novel Pathogens (SAGO), an advisory group of international experts from specialties including epidemiology, virology, genomics, tropical medicine, public health and animal health. The group is tasked with learning what it can about SARS-CoV-2 while streamlining the study of future emerging pathogens, in hopes of more quickly understanding their origins and transmission so they can be contained. But its first assignment will be bringing new life to the largely stalled investigation of COVID-19's origins—an investigation that politicians, world leaders and countless members of the public have long put pressure on the WHO to deliver.

It may be too late. Trying to reverse-engineer a virus's origins two years into the pandemic it caused is like "going back to the scene of a crime two years later and the crime scene has been scrubbed," says Lawrence Gostin, a professor of global health law at Georgetown University who has served on numerous WHO advisory committees.

That doesn't mean it isn't worth trying.

WHEN CASES of what we now know to be COVID-19 were first reported near Wuhan, China, in late 2019, the cluster seemed to be linked to an animal market. But as time went on, some experts asked whether the virus could have been lab-made. Others noted that it could have been circulating, undetected, well before its existence became public knowledge—perhaps first infecting people outside the Wuhan area. Scientists and elected officials from around the world called for an independent investigation into the virus's origins.

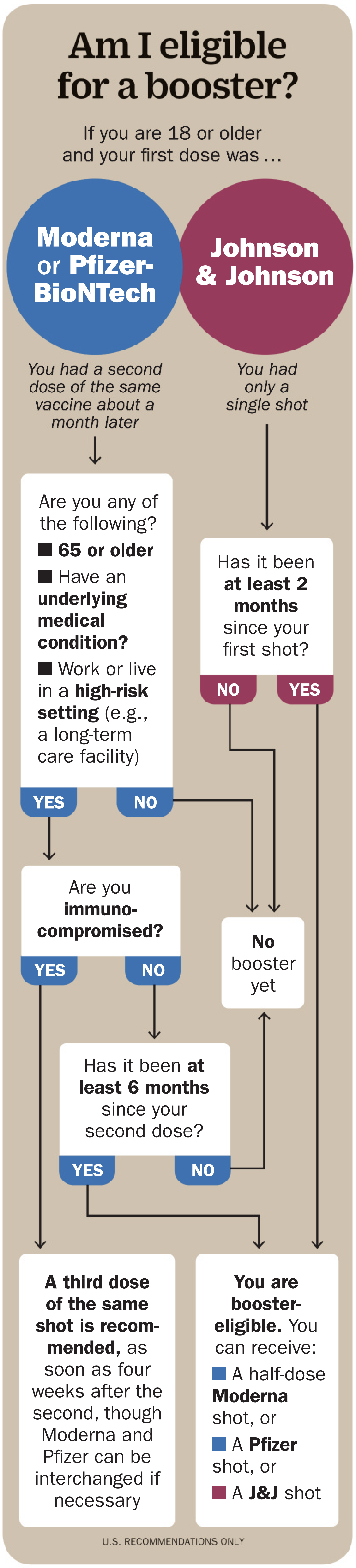
Chinese officials initially resisted those calls, but eventually let in a WHO-led mission in January 2021. The team's findings, published in a March report, were inconclusive, sparking widespread consternation. Fourteen countries, including the U.S., released a joint statement calling the report "significantly delayed and lack[ing] access to complete, original data and samples." WHO officials and researchers later said China withheld data from the investigators.

In July, China rejected the WHO's plans for a second effort, which would have included further research into the possibility of a lab leak. Chinese officials have repeatedly denied that any such leak occurred. "We will not accept such an origins-tracing plan as it, in some aspects, disregards common sense and defies science," the vice minister of China's National Health Commission told reporters.

SAGO's work will not include another mission to China, says Maria Van Kerkhove, who leads the WHO's Emerging Diseases and Zoonoses unit. The group's job is not to conduct field research, she explains, but rather to review existing science and advise the WHO (and its member states) about what to do next.

"It's not about blame. It's not about pointing fingers. It's about being better prepared for next time," Van Kerkhove continues. "Let's say another disease emerges tomorrow … This group can come together and take whatever information we have, whatever we know about the cluster or the case, and advise, 'These things need to happen right now.'"

Georgetown's Gostin says a standing committee, with the sole purpose of investigating new pathogens, will make it easier to find answers in the future. But he doubts it will push the SARS-CoV-2 investigation forward. The WHO cannot compel countries to give unfettered access to its researchers, and it may be too late for effective cooperation when it comes to COVID-19. "The same structural barriers are in place," Gostin says. "As far as China is concerned, the investigation is over."


Am I eligible for a booster?
If you are 18 or older and your first dose was …
Moderna or Pfizer-BioNTech
Johnson & Johnson
You had a second dose of the same vaccine about a month later
You had only a single shot
Are you any of the following?
■ 65 or older
■ Have an underlying medical condition?
■ Work or live in a high-risk setting (e.g., a long-term care facility)
YES
NO
Has it been at least 2 months since your first shot?
NO
YES
Are you immuno-compromised?
YES
NO
No booster yet
Has it been at least 6 months since your second dose?
YES
NO
A third dose of the same shot is recommended, as soon as four weeks after the second, though Moderna and Pfizer can be interchanged if necessary
You are booster-eligible. You can receive:
■ A half-dose Moderna shot, or
■ A Pfizer shot, or
■ A J&J shot
U.S. RECOMMENDATIONS ONLY

PREVIOUS PAGE: IMAGE POINT FR/NIH/NIAID/BSIP/UNIVERSAL IMAGES GROUP/GETTY IMAGES

A GREEN LIGHT FOR SUSTAINABLE FINANCE

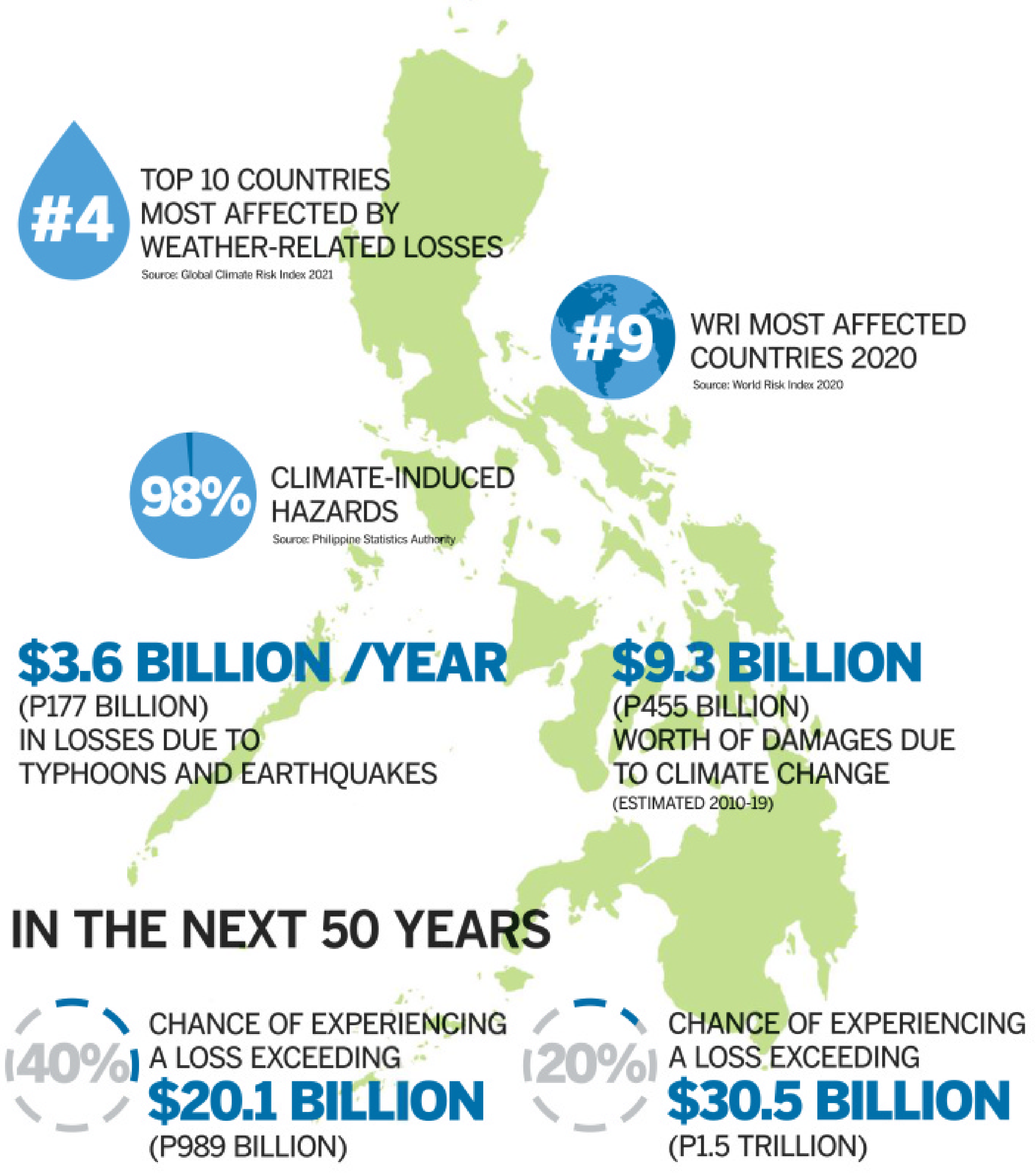
THE PHILIPPINES IS AT THE FOREFRONT OF RECRUITING THE FINANCIAL SECTOR TO FIGHT CLIMATE CHANGE.

When it comes to climate change, there is good news. Scientists and innovators have already created many of the tools and strategies needed to adapt to, mitigate, or even solve the climate crisis. The costs, however, can be extremely high. With world leaders gathering in Glasgow for COP26 this November, the value of global partnerships is clear. Now, one partner is needed more than ever: the financial community.

The Republic of the Philippines is on the front lines of the climate crisis. As sea levels, storms, and extreme weather rise with global temperatures, this nation of islands in the Asia Pacific and its 110 million people is among the most vulnerable. The country is not yet a financial powerhouse. Nonetheless, the Philippines is determined to punch above its weight class in green and climate finance.

“We want to show how a developing country like the Philippines can lead in terms of mainstreaming climate change through the financial sector,” says Secretary of Finance Carlos Dominguez.

In April, the Philippines submitted its first nationally determined contribution (NDC) under the Paris Agreement. The country pledged to reduce its greenhouse gas emissions by 75 percent by 2030, of which 2.7 percent is unconditional and 72.3 percent is conditional. The pledge covers the agriculture, waste, industry, transport, and energy sectors. That is a huge challenge. It requires a broad range of actions including a moratorium on new coal power plants, conversion to renewable energy, and a shift to e-mobility. The transition to clean energy alone will require $121 billion over 20 years.


#4
TOP 10 COUNTRIES MOST AFFECTED BY WEATHER-RELATED LOSSES
Source: Global Climate Risk Index 2021
#9
WRI MOST AFFECTED COUNTRIES 2020
Source: World Risk Index 2020
98%
CLIMATE-INDUCED HAZARDS
Source: Philippine Statistics Authority
$3.6 BILLION /YEAR
(P177 BILLION)
IN LOSSES DUE TO TYPHOONS AND EARTHQUAKES
$9.3 BILLION
(P455 BILLION)
WORTH OF DAMAGES DUE TO CLIMATE CHANGE
(ESTIMATED 2010-19)
IN THE NEXT 50 YEARS
40%
CHANCE OF EXPERIENCING A LOSS EXCEEDING
$20.1 BILLION
(P989 BILLION)
20%
CHANCE OF EXPERIENCING A LOSS EXCEEDING
$30.5 BILLION
(P1.5 TRILLION)

To marshal funding, the country needs the participation of governments, businesses, and civil society both at home and abroad. The goal is to create an effective blend of international and domestic public and private finance and investment.

The Philippines, with the assistance of the United Kingdom, has drawn up a Sustainable Finance Roadmap to organize climate funding and a set of Sustainable Finance Guiding Principles for the country. Both address gaps in the promotion of sustainable investments through finance and facilitate investments in public and private infrastructure.

The country’s banks and private companies are playing their part. Since 2017, seven commercial banks have issued more than $2.7 billion worth of green, social, and sustainability bonds. As of September 2021, Philippine companies had issued $4.8 billion worth of ASEAN-labeled Green, Social, and Sustainability (GSS) Bonds, equivalent to 29 percent of the total ASEAN-labeled GSS Bond issuances.

Through the Philippine Crop Insurance Corporation, the government is also expanding protections to farmers from crop losses while reinforcing risk mitigation and resilience efforts. The Department of Finance is also pushing for the passage of a bill banning single-use plastics to reduce marine pollution.

Much more, however, must be done. As new technologies are scaled up, workforces need to be retrained.

Just as the Philippines is marshaling financial resources, it is also mobilizing ideas. At COP26, the Philippines, through Secretary Dominguez, will discuss how the financial sector can make a difference in climate change by charting a course for the mainstreaming of climate and sustainable finance. Asian Development Bank President Masatsugu Asakawa and Vice President for East Asia, Southeast Asia and the Pacific Ahmed M. Saeed, as well as US Deputy Special Envoy for Climate Jonathan Pershing will join Secretary Dominguez for this conversation.

The rewards for achieving that goal will be priceless. “Low carbon approaches to help mitigate this climate crisis will make our economy more resilient and our growth sustainable,” Dominguez says.

Should the Philippines’ roadmap for green financing prove successful, it will give a green light to other developing countries to follow a similar path.

FOR MORE INFORMATION ON CLIMATE INVESTMENTS, VISIT WWW.PHILIPPINES.BUSINESS/GREEN-FINANCE

NEWS TICKER

Military coup in Sudan ousts government

Sudan's military re-took control of the country in an Oct. 25 coup, jailing prime minister Abdalla Hamdok and deposing a transitional government weeks before it was to transfer control to civilians. The coup **undid fragile progress made after massive protests** brought down the last military-led government in 2019.

Pig kidney transplant successful

Surgeons in New York City announced Oct. 21 that they had **attached a kidney grown in a genetically altered pig to a brain-dead human patient**—where it worked normally for 54 hours. As the first successful operation of its kind, it could suggest a path forward for accessing organs for transplant patients.

Bolsonaro may face COVID charges

A committee of Brazilian Senators recommended Oct. 26 that President **Jair Bolsonaro be criminally charged for his handling of COVID-19,** which has left Brazil with the world's second-highest death toll. The recommended charges include crimes against humanity and charlatanism.

HIGHER POWER Villagers on the island of La Palma in the Canaries carry a statue of their patron saint, the Virgen del Pino, on Oct. 19, praying for an end to a now monthlong eruption. The Canary Islands Volcanology Institute confirmed on Oct. 25 that portions of the Cumbre Vieja's volcanic cone have collapsed, spewing out new lava flows that threaten more of La Palma's banana crop and will likely force thousands more to evacuate. —*Paulina Cachero*

SUSANA VERA—REUTERS

BULLETIN

Facebook's dramatic fall from grace continues

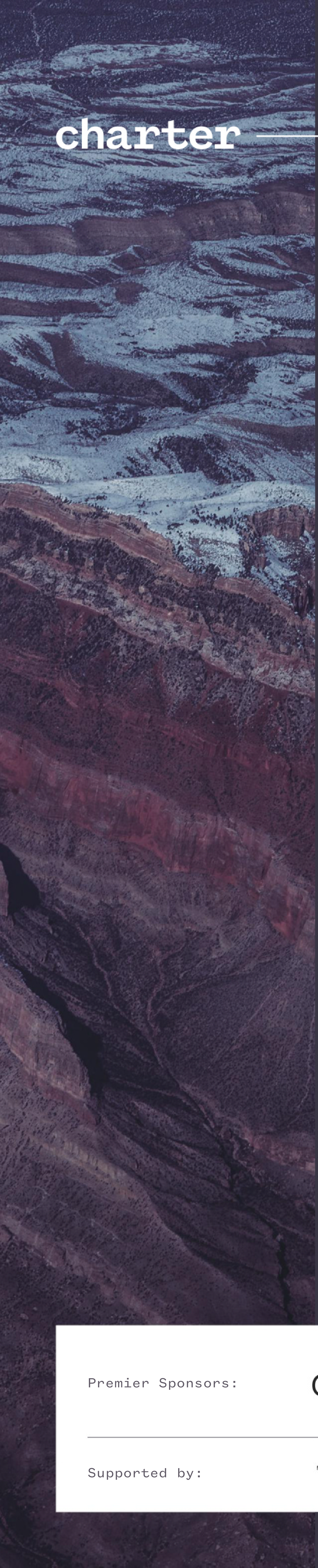
A MORE COMPLETE PORTRAIT OF HOW Facebook has been vividly aware of its harmful effects came to light on Oct. 25, via a series of reports on internal Facebook documents leaked to the media by whistleblower Frances Haugen. On the same day, Haugen testified in front of British lawmakers shaping new Big Tech legislation. "Mark Zuckerberg has unilateral control over 3 billion people," Haugen said. "There's no will at the top to make sure these systems are run in an adequately safe way."

"FACEBOOK PAPERS" Damning details from the leaked documents have revealed Facebook's problems with hate speech and disinformation are dramatically worse in the developing world—the social network has long underinvested in building safety systems for languages spoken outside of North America and Europe. (On Oct. 25, Zuckerberg called the coverage based on Haugen's leaks "a coordinated effort to selectively use leaked documents to paint a false picture of our company.")

REGULATORY PLANS Haugen has embarked on an extensive tour of Europe, where lawmakers have been far more aggressive than the U.S. in regulating Big Tech. European Union rules on data protection forced changes in 2018 that also protected American users, and coming regulations would compel platforms to regulate content. Haugen said she hoped her testimony could shape that incoming regulation to better reflect how social platforms actually work on the inside.

BOTTOM LINES Wall Street, it seems, still believes Facebook can weather the storm. The company's stock price has slipped in recent weeks but is still historically high. In its third-quarter earnings call, Facebook announced that its profits are projected to rise 39% year over year in 2021. But although investors have proved unwilling to force Facebook to change course, Haugen's documents—and now testimony—may yet force a different kind of reckoning.

—BILLY PERRIGO *and* NIK POPLI



charter

Workplace Summit

November 9 & 10, 2021
11am to 2pm ET

VIRTUAL | FREE TO ATTEND

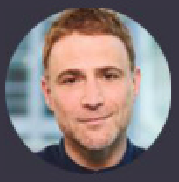
What kind of leader do I need to be now?

We are amid a workplace revolution. The old playbooks for management—from motivation to meetings—are no longer relevant. Join top researchers and organizational leaders at the Charter Workplace Summit to discuss best practices for the new era of business.

Featured speakers include:

EDITH COOPER
Event Co-chair
Co-founder
Medley

JORDAN TAYLOR
Event Co-chair
Co-founder and CEO
Medley

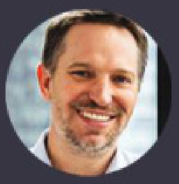


STEWART BUTTERFIELD
CEO and Co-founder
Slack

JOHN SIMONS
Executive Editor
TIME

MEREDITH KOPIT LEVIEN
CEO
The New York Times
Company

JACQUELINE M. WELCH
EVP, CHRO
The New York Times
Company



RYAN ROSLANSKY
CEO
LinkedIn

NICHOLAS BLOOM
Professor of
Economics
Stanford University

Visit charterworks.com/events to register.

Premier Sponsors: citrix PayPal

Knowledge Partner: McKinsey & Company

Supported by: TIME EgonZehnder enquire AFTERSHOKZ

GOOD QUESTION

Are America's leaders growing too old to serve?

THEY SAY WISDOM COMES WITH AGE. YET so few of the nation's leaders seem to have the wisdom to know when it's time to call it a day.

"At some point, and statistically it's in the 80s, you begin a more rapid decline," Republican Senator Bill Cassidy told *Axios on HBO* in an interview airing on Oct. 17. "So anybody in a position of responsibility who may potentially be on that slope, that is of concern, and I'm saying this as a doctor."

At 78, President Joe Biden has faced attacks on his mental fitness, as did his septuagenarian predecessor, Donald Trump. Speaker of the House Nancy Pelosi is still negotiating reconciliation packages at 81, while the Senate's top Republican Mitch McConnell is still trying to block them at 79. (And Senator Chuck Grassley of Iowa, 88, is planning to run for re-election next year; if he wins, he could be nearly a century old by the time he finishes that term.)

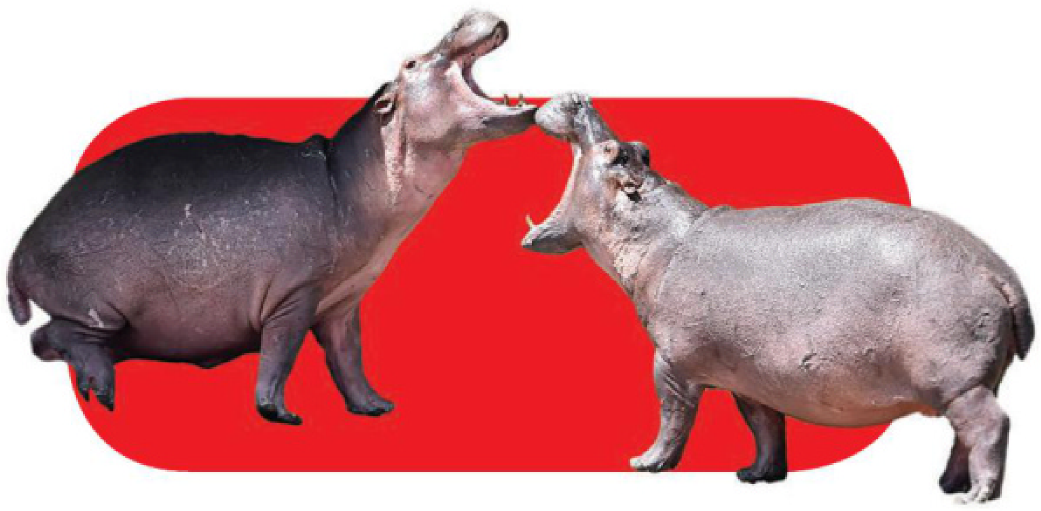
Cassidy, who is 64, made clear that he wasn't singling out anyone in particular. "Would it be reasonable to have—for Supreme Court Justices, members of Congress and leadership positions in the Executive Branch—an annual sort of evaluation in which they would have to establish, 'Yes, I'm doing O.K.'?" Cassidy continued, noting he had heard of "senile" Senators. "I think that's actually a reasonable plan."

Some 30 states have age-based driver's-license-renewal requirements, including many that require seniors over 70 to take extra tests or re-apply in person. That standard would apply to nearly 30% of the Senate—except you don't have to prove mental acuity to continue driving the country.

Cassidy is "not wrong," says Amanda Litman, who usually disagrees with him on policy. Litman co-founded Run for Something, which recruits and trains young Democrats as state and local candidates. The advanced age of elected officials "is a huge problem," she adds. "It's an open secret, and it directly affects the way the government functions."

One bad slip on a too-polished floor could break not only a hip but a majority, crumple a President's agenda or upset the balance of power. When then 80-year-old Senator Patrick Leahy of Vermont was briefly hospitalized in January, it sent tremors through the Democratic caucus, which could not afford to lose a single member in a 50-50 Senate. A reigning gerontocracy also means that the priorities of younger people—who had record turnout in the last two elections—can get ignored. Already, tuition-free college has been nixed from the Democrats' spending bill, and climate-change provisions are in jeopardy.

"The problems of young Americans are just a lot different now than when a lot of the folks in Congress were our age," says Maxwell Alejandro Frost, a 24-year-old former March for Our Lives organizer who is running for Congress in Florida. "I do think there's an age at which people just become out of touch with things." —CHARLOTTE ALTER



NATURE

Animal instincts

On Oct. 15, a federal judge ruled **that the descendants of hippos smuggled into Colombia by drug kingpin Pablo Escobar have the legal rights of people**—the first ruling of its kind in the U.S. Here, more creatures in court. —*Madeleine Carlisle*

ORANGUTANS

In 2015, an Argentine judge granted "legal personhood" to Sandra, a hybrid Bornean and Sumatran orangutan who had lived in the Buenos Aires Zoo for two decades. At the judge's direction, Sandra was moved to a sanctuary in the U.S. in 2019.

ORCAS

The animal-rights group PETA sued SeaWorld in 2011, arguing that five captured orcas—including Tilikum, the killer whale featured in the documentary *Blackfish*—deserved protection under the 13th Amendment's ban on slavery. But in 2013, a judge ruled that the law did not apply.

ARCTIC FOXES

On Oct. 25, Icelandic police raided the home of a man allegedly raising an Arctic fox he had named Gusti Jr. While the country's laws ban people from owning "wild animals" as pets, Gusti's owner argues his fox should not be classified in that way.

NEWS TICKER

FDA panel: COVID vaccine O.K. for kids

An advisory committee on Oct. 26 recommended that the U.S. Food and Drug Administration **approve the Pfizer-BioNTech COVID-19 vaccine for children** ages 5 to 11, a day after the drug company Moderna announced that its COVID-19 vaccine is safe and efficacious for children ages 6 to 11.

Human-rights group exits Hong Kong

The prominent human-rights group Amnesty International announced Oct. 25 that it would close its offices in Hong Kong by the end of the year, **citing the national-security law imposed on the city by Beijing in 2020,** which restricts freedom of expression.

U.K. lawmaker-killing suspect charged

British police charged a 25-year-old man with murder and terrorism-related offenses Oct. 21 in relation to the **killing of David Amess, 69, a Conservative parliamentarian** stabbed to death while meeting constituents on Oct. 15. Prosecutors said Ali Harbi Ali, a Briton with Somali heritage, had been plotting to kill a politician for two years.

Milestones

DIED

Jerry Pinkney

Brought Black beauty to life

By Jason Reynolds

CHILDREN'S-BOOK ILLUSTRATOR Jerry Pinkney, who died on Oct. 20 at the age of 81, was a cultural touchstone. Whether with tales of the Rev. Martin Luther King or Black cowboys, I don't know if anyone has accomplished bringing Black history and culture—and Black beauty—to life through illustrations with the consistency and vigor that Pinkney did, and for as long he did.

Among his most stunning works was *The Lion & the Mouse,* an adaptation of the classic Aesop fable, which in 2010 won the Randolph Caldecott Medal for outstanding illustration.

Pinkney's work always had a certain kind of whimsy to me, which is so rare when it comes to the representation of Black people. I think our lives are often thought of as heavily laden; Pinkney's work is about showing us, even in our toughest moments, with a certain element of light. When I look at his illustrations, I don't feel the weight of our history. I know it's there, but it doesn't feel like that. It feels lighter.

Pinkney has surely inspired and spawned hundreds of Black artists. We talk about legacy so cavalierly these days, but we have to acknowledge that Jerry Pinkney will go down as a legend. The thing about Black illustrations in children's books is that they create a palette for children; the first art they see is in those books. They create taste.

Reynolds is an award-winning author and the current Library of Congress National Ambassador for Young People's Literature

Pinkney at work in his home studio on Aug. 6, 2001

Tyler at a Friends *anniversary event in 2014*

DIED

James Michael Tyler

JAMES MICHAEL TYLER, WHO PLAYED THE scene-stealing Central Perk barista Gunther on all 10 seasons of the NBC sitcom *Friends,* died on Oct. 24 at the age of 59.

Tyler was working at a real coffee shop in L.A. in 1994 when he snagged the part. He began as a background actor but leveraged small moments of mooning after Jennifer Aniston's Rachel into a long-running gag. In his most iconic scenes, Tyler, a talented physical comedian, often didn't speak, but rather glowered at Rachel's love interests—in particular Ross (David Schwimmer)—or endured scratches from her demonic cat. In time, Tyler became the honorary seventh friend; by its finale in 2004, he had appeared in a majority of *Friends'* 236 episodes.

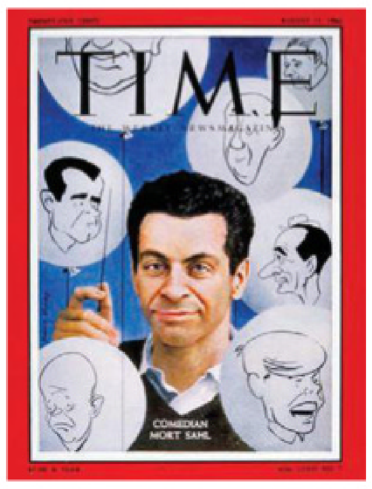
Tyler's doctor diagnosed his prostate cancer during a routine checkup in 2018, and he dedicated the last years of his life to spreading awareness about cancer screenings. "My goal this past year was to see my 59th birthday. I did that," he said on the *Today* show in June. "My goal now is to at least save one life."

—ELIANA DOCKTERMAN

DIED

Former South Korean President **Roh Tae-woo,** who ruled the country from 1988 to 1993, at 88 on Oct. 26.

> **Mort Sahl** *(right),* stand-up comedian and satirist, at 94 on Oct. 26.



ELECTED

Sandra Mason as the **first President of Barbados**—who in November will replace Queen Elizabeth II as the country's head of state—on Oct. 20, in a break from the island's colonial past.

DETECTED

A **potential exoplanet** 28 million light-years away in the Whirlpool Galaxy—the first identified outside our galaxy, the Milky Way—according to an Oct. 25 NASA press release.

KIDNAPPED

A group of **17 missionaries and family members** in Port-au-Prince, Haiti, on Oct. 16. The gang believed to be responsible has asked for a $17 million ransom payment.

FILED

A lawsuit on Oct. 19 by a woman **seeking $5 million from cereal brand Kellogg's** for allegedly misleading customers over how much strawberry its strawberry Pop-Tarts actually contain.

HIPPOS: RAUL ARBOLEDA—AFP/GETTY IMAGES; PINKNEY: JOYCE DOPKEEN—THE NEW YORK TIMES/REDUX; TYLER: PAUL ZIMMERMAN—GETTY IMAGES

^
Taliban members disperse a rally in support of women's education in Kabul on Sept. 30

Studying in secret online

By Vivienne Walt

ON THE DAY THE TALIBAN CAPTURED KABUL, FARAH was at her university. A young man burst in to their classroom, disrupting a financial-management class. "He said, 'They are coming here. Run!'" says Farah, 24, who asked to be identified by a pseudonym. Shaking with fear, she says, "we just stood and started collecting all our notebooks."

In the two months since Afghanistan's government collapsed on Aug. 15, thousands of Afghan girls and women like Farah have been shut out of their high schools and universities, their studies over and futures in flux.

Before August, about half the 20,000 or so students at Kabul University, the country's oldest university, were female. Women's education was perhaps the strongest sign of change and hope for the new Afghanistan.

Yet despite Taliban assurances during negotiations with the U.S. that all Afghans would have the right to education, the new government has barred them from setting foot on campuses—a situation that shows no signs of ending, despite pressure from Western governments. Taliban spokesman Zabihullah Mujahid recently said they would be allowed to resume their studies when there is "an environment where female students are protected." That has strong echoes of the Taliban banning girls' education during their rule over Afghanistan between 1996 and 2001.

However, a lifeline has emerged for these women: online studies. Hundreds of female students have rushed in recent weeks to register for a remote-learning program launched by a California-based nonprofit online university, entering a new program that begins Nov. 1 geared specifically at women banished from their education by the Taliban.

Shai Reshef, founder and president of University of the People (UoPeople), which offers U.S.-accredited degrees to about 100,000 students worldwide, has offered 1,000 scholarships to Afghan women, funded by the Bill and Melinda Gates Foundation, Clinton Foundation, Ford Foundation and others.

Others are attempting to offer opportunities for Afghan women to study abroad. The U.N. Development Programme offers several scholarships in nearby Central Asian countries, for example, all funded by the E.U.

But UoPeople appears to be the sole organization offering large numbers of full scholarships for Afghan women to earn degrees online, without leaving their homes. About 2,000 applied, and Reshef says he has raised funds to meet the demand. "With us, they can study at home," he says, "and no one needs to know."

***TIME* SPOKE TO FIVE WOMEN** who had been accepted, all of whom are either in hiding or keeping their studies secret. Nasrin, 21, another Kabul University student, says her new scholarship has rescued her from sinking into despair. Despite the high Internet costs in Afghanistan—and patchy connectivity and frequent electricity blackouts—she says she is determined to throw herself into studying to keep herself emotionally stable. Ahead of her UoPeople course, Nasrin has also registered for online English classes offered by King's College London, as well as a six-week psychology course at the University of Cape Town in South Africa.

Farah, who fled her financial-management class the day the Taliban seized Kabul, now plans to get a business degree from UoPeople. With her husband out of work, she says the couple will struggle to pay higher Internet charges; she intends to study at night, after putting her daughter to bed. "I have to go through with my dream," she says. "I was planning for my future. I want to achieve that." ◻

VICTOR J. BLUE—THE NEW YORK TIMES/REDUX

Halyna Hutchins' death could be a turning point for Hollywood

By Andrew R. Chow

A candlelight vigil for Halyna Hutchins, in Burbank, Calif., on Oct. 24

CHRIS PIZZELLO—AP

GUNS HAVE DOMINATED AMERICAN movies for decades, with millions of fake rounds of ammunition fired off by John Wayne, Sly Stallone, Keanu Reeves, Linda Hamilton and many other action stars. But this penchant for onscreen violence has ended in real-life tragedy several times throughout Hollywood history—and did so once again on Oct. 21, when cinematographer Halyna Hutchins was killed after actor Alec Baldwin discharged a prop firearm while filming the movie *Rust* in New Mexico. According to police reports, Baldwin was rehearsing a scene in which he aimed a revolver at the camera; he had been told the gun did not contain live rounds. Hutchins, behind the camera, was hit in the chest, while director Joel Souza was hit in the shoulder and treated for injuries at the hospital.

Many film workers in Hollywood see this tragedy as a breaking point not only for the way guns are used on sets, but also for larger safety disputes. "Across the board, this industry is filled with red flags," film worker Paul Rodriguez tells TIME. "Every day, there's something where you could die."

Although some guns used on movie sets are rubber replicas, many are actual weapons, either empty or loaded with blanks—some directors or actors prefer the visceral authenticity of a real gun and the way it recoils or ejects a cartridge. Blanks, however, can still be dangerous. (The wad that holds the gunpowder—which can be made of paper, plastic, felt or cotton—can be ejected with such force as to be lethal at close range.) In 1984, actor Jon-Erik Hexum accidentally killed himself with a pistol loaded with blanks on the set of *Cover Up* when, joking around, he held the gun to his temple and pulled the trigger. In 1993, actor Brandon Lee, the son of Bruce Lee, was killed while filming *The Crow* by a gun that, while supposed to be loaded with blanks, had a bullet lodged in its barrel.

> **'Across the board, this industry is filled with red flags.'**
>
> PAUL RODRIGUEZ, film worker

WHEN FILM CREWS WORK with real guns on set, there are many established protocols in place to prevent accidents. Property masters obtain guns and make sure they're properly stowed; armorers handle them and give strict instructions to the cast and crew about their usage. Firing pins are often removed, and bullets are not supposed to be anywhere near a set.

The fact that Baldwin was handed a live gun reveals a "breakdown in the chain of responsibility," explains Bob Primes, a cinematographer who has worked many times with guns. "Somewhere along the line, someone got rushed." The police and other news outlets have reported turmoil on set prior to the shooting: crew members walked out that morning to protest working conditions and had expressed concerns about the set's firearms protocols in the weeks prior.

It is likely that the usage of real guns on Hollywood sets will be dramatically stripped back. On Oct. 22, the ABC cop show *The Rookie* announced it would stop using "live" guns during shoots and instead rely on postproduction special effects. On social media, the directors Paul Feig and Rian Johnson have endorsed similar measures.

And the incident also threatens to upend a fragile agreement between the union IATSE (International Alliance of Theatrical Stage Employees) and Hollywood media companies, who had just negotiated a new contract to avoid a massive strike. Many IATSE members now say they will vote "no" on the new deal, citing the pervasiveness of 16-hour days and unsafe working conditions like the ones that seem to have led to Hutchins' death. "This is a highly dramatic incident in which a young woman was killed. But you don't hear about all the fender benders and traffic accidents [with] people that fell asleep behind the wheel," says Stephen Lighthill, president of the American Society of Cinematographers. "I think it's time to sit down and say, 'We're not going to do this anymore.'"

CONTENT FROM SOMPO HOLDINGS

SOMPO HOLDINGS

A Theme Park for Security, Health & Wellbeing

SOMPO is a global group operating in 29 countries worldwide. We were established over 130 years ago and our parent company is listed on the Tokyo Stock Exchange.

Our aim is to contribute to a society where people can enjoy their lives in health and prosperity. To do this, we are building a 'Theme Park for Security Health and Wellbeing' to provide advanced products and services for our customers – now and in the future.

Historically, SOMPO has focused exclusively on the provision of insurance coverage: from consumer insurance products for motor vehicles and home, life and disability; to coverage against cybercrime, business loss and agricultural crop damage; to catastrophe insurance against earthquakes, floods, hurricanes and typhoons.

But this is only part of the story.

Beyond insurance, SOMPO is a leading provider of nursing care and related services in Japan, particularly in dementia care and robotics. Our goal is to change how eldercare is provided, to transform how ageing diseases are understood and managed. We will expand these services and export our expertise globally.

Technology will be key to this success. We embrace the latest technology to develop our capabilities through our digital labs in Tokyo, Silicon Valley and Tel Aviv. We are developing a transformational Real Data Platform to analyze the vast amount of knowledge we have built over the years to identify new insights and develop better products and services.

COP26 presents a powerful opportunity for world leaders and business executives to discuss ways to accelerate action towards the goals of the Paris Agreement and the U.N. Framework Convention on Climate Change. But it is only a stepping-stone on a journey that we must all take together – and for the long run. It will be a challenging road to travel, but we have no choice but to move forward.

We have a lot of attractions in our Theme Park in order to meet both our customers' needs and achieve our purpose as a leading global company.

SOMPO is committed to providing social value to build a sustainable future and demonstrate our commitment to society. This philosophy draws on a modern version of Bushido. The Way of the Warrior," and practiced by samurai, Bushido is not a martial art. It is a moral code. It contains seven virtues: justice, courage, benevolence, respect, authenticity, honor and loyalty.

> **"Using Bushido as a roadmap, we can intelligently design businesses to operate in a sustainable, human-centric way, with all stakeholders' interests in mind."**
>
> **President and Chief Executive Officer**
> Sompo Holdings Inc., Kengo Sakurada.

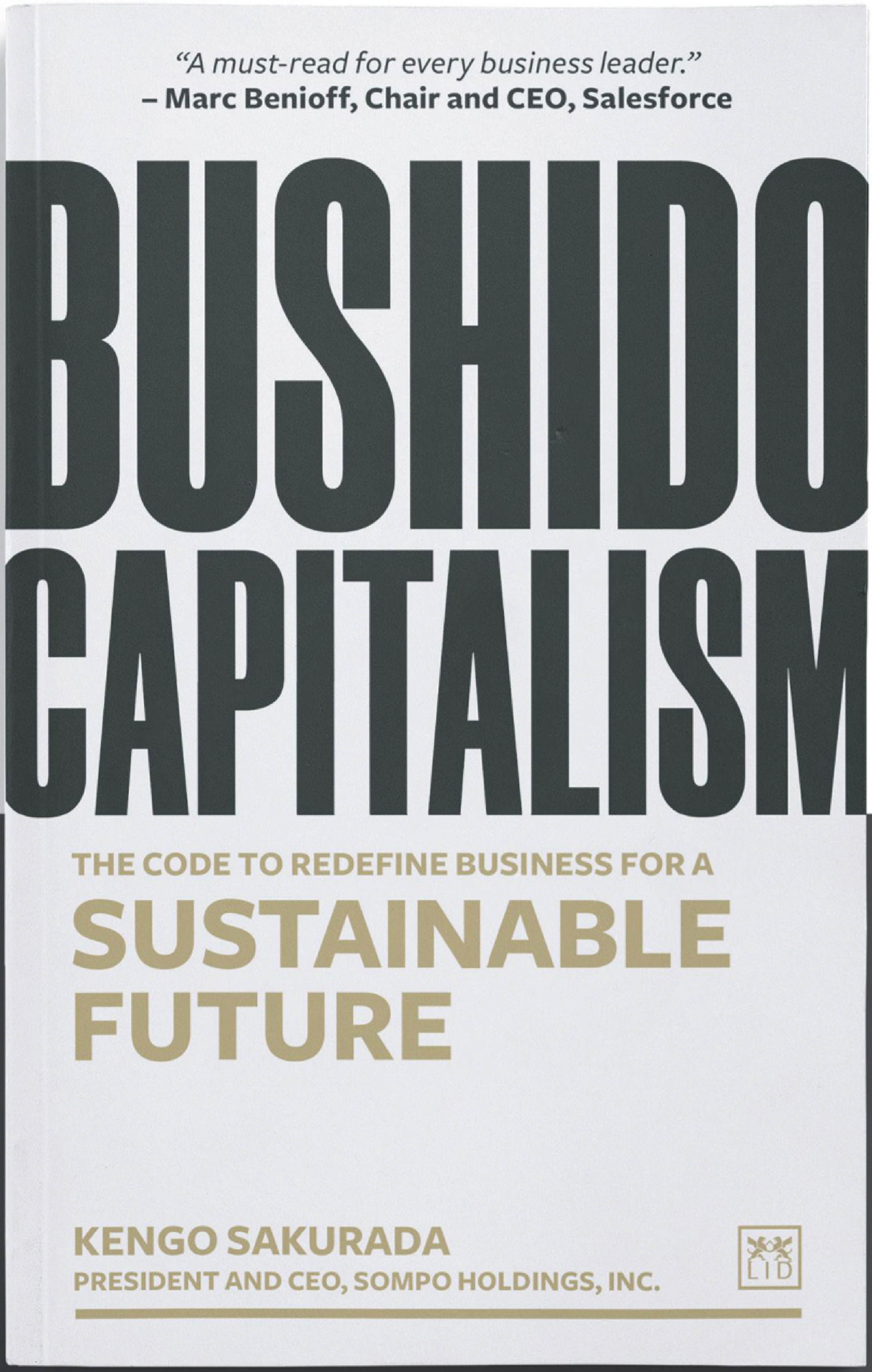
To rise to this challenge, we are re-engineering our business model to fulfill the principles of the U.N. Sustainable Development Goals and Environmental, Social and Governance requirements.

SOMPO is agile, innovative and ready for what comes next. Our mission demonstrates how, together, we can work to transform capitalism for the Security, Health and Wellbeing of all.

Our Theme Park is filled with attractions to meet both our customers' needs and achieve our purpose as a leading global company.

SUSTAINABLE DEVELOPMENT GOALS

THE POWER OF BUSINESS
FOR THE COMMON GOOD OF SOCIETY



"A must-read for every business leader."
– Marc Benioff, Chair and CEO, Salesforce

BUSHIDO CAPITALISM

THE CODE TO REDEFINE BUSINESS FOR A
SUSTAINABLE FUTURE

KENGO SAKURADA
PRESIDENT AND CEO, SOMPO HOLDINGS, INC.

LID

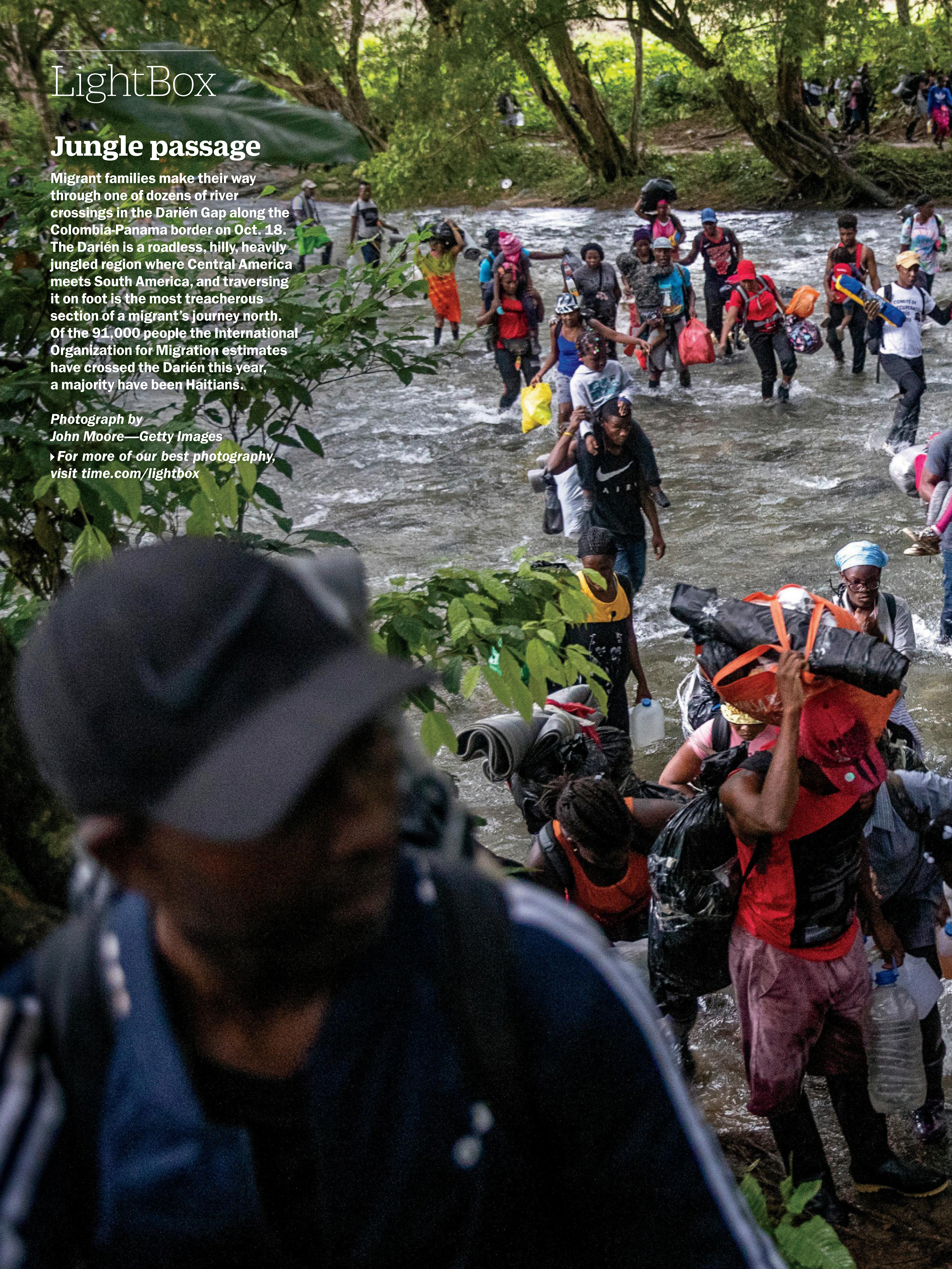
"Sakurada reminds us of what is required to build something both lasting and significant."

– **ALEXANDER C. KARP**
Co-founder and CEO of Palantir Technologies Inc.

"Drawing on thought-provoking lessons in collaboration, confidence and creativity, **Bushido Capitalism** is essential reading for post-pandemic leaders."

– **DANIEL PINK**
New York Times bestselling author of **When**, **Drive**, and **A Whole New Mind**

Available through all good book retailers
Print edition: **ISBN 978-1-911671-58-9** | E-book edition: **ISBN 978-1-911671-59-6**
Published by LID Publishing (**www.lidpublishing.com**)



Jungle passage

Migrant families make their way through one of dozens of river crossings in the Darién Gap along the Colombia-Panama border on Oct. 18. The Darién is a roadless, hilly, heavily jungled region where Central America meets South America, and traversing it on foot is the most treacherous section of a migrant's journey north. Of the 91,000 people the International Organization for Migration estimates have crossed the Darién this year, a majority have been Haitians.

Photograph by John Moore—Getty Images

▸ *For more of our best photography, visit time.com/lightbox*

CONTENT FROM INDORAMA VENTURES

PET recycling: No time to waste

IN A CIRCULAR ECONOMY, RECYCLABLE PLASTIC PACKAGING IS A SOLUTION, NOT A PROBLEM, SAYS INDORAMA VENTURES

ALOKE LOHIA
Founder & Group CEO, Indorama Ventures

GLOBAL PLASTIC ACTION PARTNERSHIP

KRISTIN HUGHES
GPAP Director & Member of the Executive Commitee at the WEF

THE RECYCLING PARTNERSHIP

KEEFE HARRISON
Founder & CEO of the Recycling Partnership

Littering, illegal dumping and mismanagement of waste are polluting our oceans. People are rightfully demanding solutions, and nowhere is this more evident than in packaging. Better waste collection and recycling are within our grasp, and we have no time to waste.

The solution is the circular economy. An idea formulated in the late 1980s, the circular economy can be summed up as “make-use-recycle.” Resources are managed responsibly to make products and packaging that can be remade and reused. Sadly, most of the world is still stuck in the linear economy of “take-make-waste.” Our environment and future generations demand better.

Few have taken this challenge more seriously than Indorama Ventures or IVL. The Bangkok-based multinational is the leading global recycler of plastic beverage bottles.

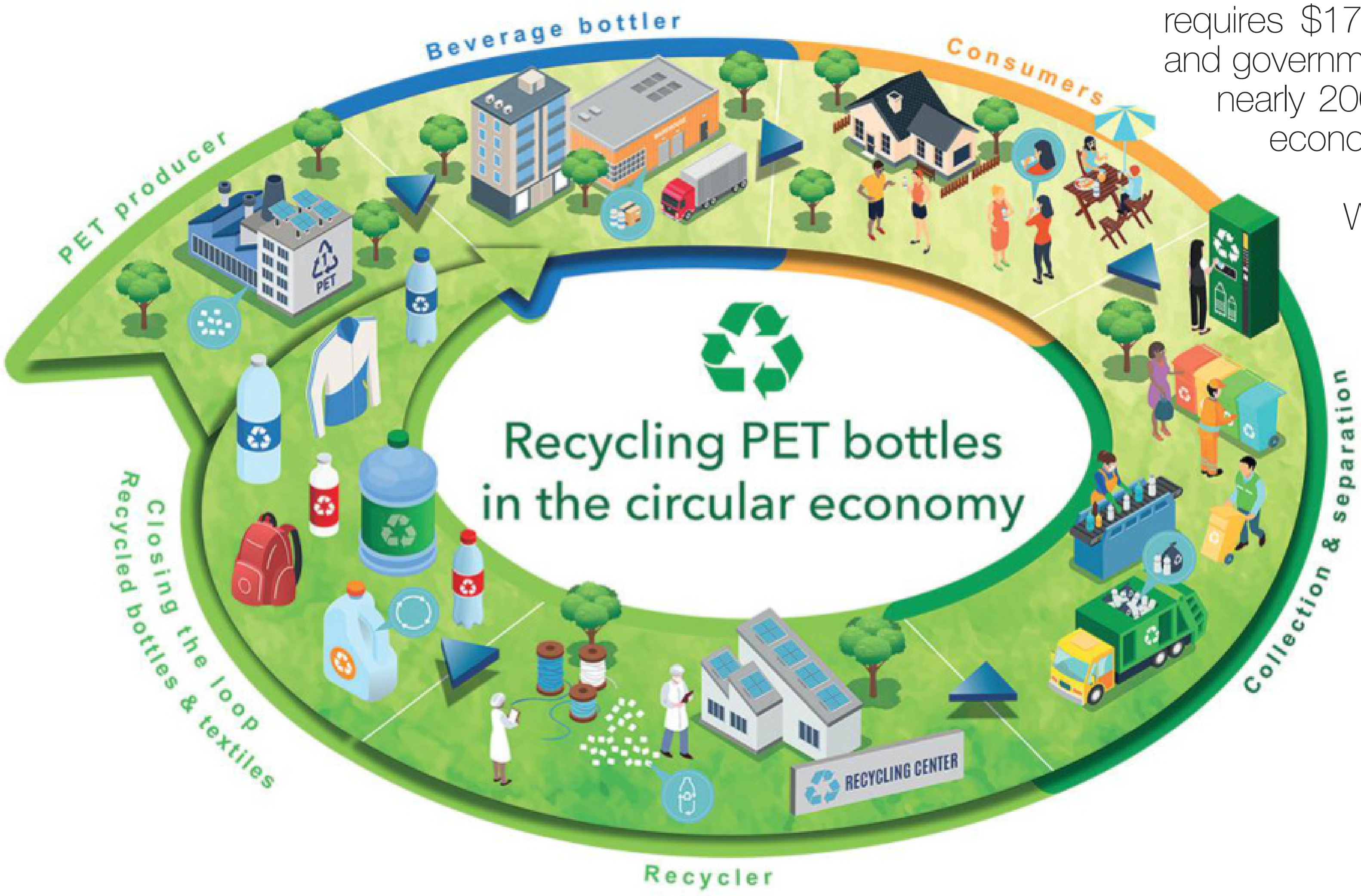
“Sustainability and responsible business are not just slogans to us,” says founder and Group CEO Aloke Lohia. There is an answer, he says, and the material in all those bottles – PET, or Polyethylene Terephthalate – is actually part of it.

That’s because PET is fully recyclable. And to create the circular infrastructure to ensure PET bottles are recycled, Indorama Ventures is partnering with the World Economic Forum’s Global Plastic Action Partnership (GPAP) and The Recycling Partnership in America.

> **“Sustainability and responsible business are not just slogans to us”**

“IVL’s global presence, fully integrated model and decades of recycling know-how means they are uniquely placed to close the loop for PET plastic,” said Ms. Kristin Hughes, GPAP Director and Member of the Executive Committee at the World Economic Forum. “Together we can drive high-potential solutions to improve collection, sorting and recycling – to ensure that plastic never ends up as waste.”

Recognizing this, Indorama Ventures adopted a circular economy approach more than a decade ago. Since 2011, when it acquired its first recycling plant, the firm has recycled over 63 billion PET bottles. Few consumers realize that PET bottles are commonly recycled and have a lower carbon footprint than alternative beverage packaging materials such as glass or aluminum*. Dealt with sustainably, PET fits perfectly into a circular economy.



Those 63 billion recycled bottles were just the start. IVL is investing $1.5 billion to build and expand the recycling facilities needed for a circular economy for PET bottles. Today it has a global footprint of recycling facilities on four continents. These will help IVL reach its goal to recycle 50 billion PET bottles every single year by 2025.

Recycling’s benefits go beyond reducing waste. It also saves energy and water use, lowers greenhouse gas emissions and demand for finite resources. Those are essential for a circular, sustainable economy and the fight against climate change.

But recycling plants are just one slice of a circular economy. Collection rates must improve. In Asia, for instance, some governments have regulations that are barriers to recycling, stifling collection. The West is also struggling. Four out of 10 Americans have little or no access to recycling, according to Keefe Harrison, CEO, The Recycling Partnership. “Levelling up the U.S. residential recycling system requires $17 billion over five years and collaboration from industry and government. This will deliver $30 billion in economic benefits and nearly 200,000 new jobs within 10 years. A good return for the economy and the environment.”

With the right laws, infrastructure, and behaviors in place, IVL is betting more than a billion dollars that recycling will be a growth industry.

“Sustainability won’t just happen. As an industry, infrastructure is within our control. Building the infrastructure the world needs to deliver the circular economy for packaging is critical if we are serious about protecting our planet and our business,” Lohia says. May the circle be unbroken.

United Nations Environment Programme, 2020 “Single-use plastic bottles and their alternatives – Recommendations from Life Cycle Assessments”

INDORAMA VENTURES

The View

NATION

THE RUDENESS EPIDEMIC

By Belinda Luscombe

The pandemic may have had a lethal effect on American manners. Lawyers are reporting ruder clients. Restaurants are reporting ruder clients. Flight attendants, for whom rude clients are no novelty, are reporting mayhem; passenger fines have exceeded $1 million this year. Re-entry into society is proving to be a little bumpy. ▶

INSIDE

BIDEN'S STRUGGLE TO REVIVE THE IRAN NUCLEAR DEAL

INDRA NOOYI'S STORY OF METEORIC SUCCESS

EMILY RATAJKOWSKI ON LEARNING TO LET GO

The View is reported by Mariah Espada and Nik Popli

Some people may have thought that, having been prevented from mingling with other humans for a period, folks would greet the return of social activity with hugs, revelry and fellowship. But in many ways, say psychologists, the long separation has made social interactions more fraught. The combination of a contagious, life-threatening disease and a series of unprecedented, life-altering changes in the rules of human engagement have left people anxious, confused and—if they do not believe the restrictions were necessary—deeply resentful.

"We're going through a time where physiologically, people's threat system is at a heightened level," says Bernard Golden, a psychologist and the author of *Overcoming Destructive Anger.* This long strain on people's mental health could have been exacerbated by isolation, a loss of resources, the death of loved ones and reduced social support. "During COVID, there has been an increase in anxiety, a reported increase in depression and an increased demand for mental-health services," he adds. Lots of people, in other words, are on their very last nerve. This is true, he adds, whether they believe the virus is an existential threat or not. "Half the people fear COVID," says Golden. "Half the people fear being controlled."

Heightening the anxiety, the current situation is unfamiliar to most people. "We didn't have time to prepare psychologically," says Cristina Bicchieri, director of the Center for Social Norms and Behavioral Dynamics at the University of Pennsylvania. Then, just as it seemed the danger had passed, other limitations arrived; staff shortages, product shortages, longer delivery times. "People think, O.K., now we can go shopping and go out, and they find that life is not back to normal," Bicchieri says. "There is an enormous amount of frustration."

It's not a coincidence, psychologists say, that much of the incivility occurs toward people in customer-service industries. "People feel almost entitled to be rude to people who are not in a position of power," says Hans Steiner, emeritus professor of psychiatry at Stanford University. "Especially when they come at them, and remind them that they have to do their piece to get rid of this pandemic." The authority dynamic has been completely upended. And it's always easier to punch down.

D ICE
YOU ARE NOW ENTERING A
MASK
ZONE
PLEASE HELP US KEEP OUR PEOPLE SAFE.
SOUTH CONGRESS
AUSTIN, TEXAS

An employee cleans the window of a store in Austin. Customer-service staff have borne the brunt of the rise in rudeness

IT WASN'T AS IF AMERICANS were exactly overlooking their differences before the pandemic. Some researchers point to the increase in crude public discourse, both from political leaders and in online discussion—which encourages outsize emotions—as the tremor of tactlessness that presaged the current tsunami.

But it goes deeper. Angry interactions are not the only thing on the rise; crimes are too. "We're seeing measurable increases in all kinds of crimes, so that suggests to me that there is something changing," says Jay Van Bavel, associate professor of psychology and neural science at New York University, and co-author of a new book on social harmony, *The Power of Us.* He suggests the reasons are structural and profound; America has lost its sense of solidarity as a result of the widening gaps between haves and have-nots. "The more inequality you get, the less of a sense of cohesion there is across socioeconomic classes."

The U.S. is not alone in its re-entry rudeness. In their book, *Recovering Civility During COVID-19,* Matteo Bonotti and Steven T. Zech, of the politics department at Monash University in Melbourne, argue that people were initially bamboozled because they had to communicate using a new set of rules. "At the beginning, people just didn't know how to be polite," says Zech. It was hard to communicate a smile, and it became necessary to avoid rather than embrace people.

But after a certain point, the rudeness became deliberate. "It's meant to call attention to what they see as this kind of unjust policy," says Zech. In the minds of some of the discourteous, snapping at flight attendants is not rude, it's civil disobedience.

If the rash of brashness is not just impatience with a unique situation and actually a harbinger of something much deeper, then unwinding it will be more difficult than merely giving flight attendants more training, although that can't hurt. Meanwhile, psychologists suggest that people calm down, breathe more slowly and lower their voices when encountering difficult social situations or irate people so as not to make any situation worse. "All of anger management," says Golden, "involves pausing."

STORE WINDOW: AARON E. MARTINEZ—AMERICAN-STATESMAN/USA TODAY/REUTERS; BENTLEY: MICHAEL OCHS ARCHIVES/GETTY IMAGES

CULTURE

The LGBTQ+ history of the Harlem Renaissance

When *Passing* debuts on Netflix on Nov. 10, the film—starring Tessa Thompson and Oscar nominee Ruth Negga—will draw new attention to Nella Larsen's 1929 novel.

Questions about the relationship between the two female protagonists in this novel have made it not only a milestone work of the Harlem Renaissance, but also a milestone in LGBTQ+ history. Scholars of the 1920s and '30s point out that acknowledging the queer culture and nightlife of the Harlem Renaissance is essential in order to paint a full picture of the time—and also to show that there was a thriving LGBTQ+ scene in New York City that long predated the 1969 Stonewall uprising.

The Prohibition era paved the way for LGBTQ+ nightlife and drag balls, but the Harlem Renaissance ended when its patronage dried up during the Depression. Writing that depicted gay Harlem went out of print as well. Over the past 30 years, there have been more scholars looking to fill in the gaps of LGBTQ+ history and culture.

—Olivia B. Waxman

Lesbian blues singer Gladys Bentley in New York in 1930

THE RISK REPORT

Iran and the U.S. play their weak hands over a chasm

By Ian Bremmer

THE U.S. AND IRAN are moving closer to confrontation. In 2015, Iran signed a deal with the U.S., Britain, France, Germany, Russia and China to limit its nuclear production in exchange for the lifting of sanctions that have crippled the nation's economy. In 2018, former President Donald Trump kept a campaign promise to pull the U.S. out of the agreement, and Iran again ramped up its nuclear activity. President Joe Biden pledged to try to restore the deal, but Iran—reluctant to negotiate from a perceived position of weakness, and angry that U.S. Presidents can so easily reverse their predecessors—is playing hard to get.

Iran's government has said at various times that it wants to revive the deal, and the country's President, Ebrahim Raisi, entered office in August with a chance to seal a quick agreement with Washington. He would have had to accept limits on what Iran insists is a peaceful nuclear-energy program, but the lifting of sanctions would allow Iran to sell much more of its oil and other exports, helping to rebuild its broken economy. Instead, Iran has ramped up its nuclear program in ways that reduce the "breakout time" needed for it to build a nuclear weapon, and Raisi has offered little at the negotiating table.

> **Miscalculation on either side could provoke a spiraling conflict**

Diplomacy is now on hold, and prospects for success are fading. The Biden Administration has few options. The chaotic withdrawal from Afghanistan has reduced the President's tolerance for risk-taking with Iran that will invite Republican charges of appeasement. Israel, which speaks of Iran's nuclear program as an existential threat, fears that Biden's foreign policy focus on China and his determination to pivot America's security focus toward Asia will leave Israel alone, while America's Gulf allies are more concerned about Iran's proxy wars and cyberthreats.

The fight over the nuclear program could have spillover implications for both nations and the region. As hopes of reviving the nuclear deal fade, Iran will insist on a more limited agreement. To try to force that result, Iran will accumulate more highly enriched uranium, deploy more advanced centrifuges and test techniques for turning uranium into metal that can be used to make a bomb. As the Biden Administration works with allies to dial up more economic pressure, Iran may again remind the world that it can strike shipping in the Persian Gulf.

THERE'S ALSO A RISK inside Iran that continued economic misery will provoke antigovernment protests, and if Raisi doesn't believe he should offer the nuclear concessions needed to ease that pain, he may instead create distractions in the various Middle East conflicts in which Iran is directly or indirectly involved—particularly in Iraq and Yemen. Fear of U.S.-Israeli strikes inside Iran that his government can't effectively respond to will prevent Raisi from crossing the ultimate red line by building a bomb. Nor is Iran likely to repeat its bold 2019 attack on Saudi oil infrastructure, at least for now. But Iran's hard-line President has many options short of that, which could again raise security alerts and add upward pressure on already high and rising oil prices.

There is also a continuing risk that Israel will decide it must take military action to stop Iran, with or without a nod from Washington. More likely is the less drastic, but still dangerous, step of Israeli sabotage of Iranian nuclear and military sites, which will provoke Iranian retaliation, including in cyberspace. Miscalculation on either side could provoke a spiraling conflict.

The new Presidents of the U.S. and Iran are both playing weak hands, and that's making it unexpectedly hard to restore a deal that offers big benefits for both sides.

FUTURE OF WORK

The secrets of Indra Nooyi's success

By S. Mitra Kalita

IN HER JUST RELEASED BOOK *MY LIFE IN FULL: WORK, FAMILY, and Our Future,* former PepsiCo CEO Indra Nooyi offers insight into her exacting style, one laced with compassion, loyalty and deep relationships that get results. Several themes surface repeatedly with broad application for life, career and the overlaps within.

First, it's O.K. to love work. Perhaps in all the reams written on the juggle, especially for women, the part that often feels shafted is the work itself. Nooyi's love of the job—from walks on factory floors to battles with activist investors—is apparent and infectious.

She uses wonky but relatable examples to explain how to predict and embrace change even in behemoth companies, like going to supermarkets and Walmarts to assess Frito-Lay packaging and placement on shelves, and how watching parents and kids at birthday parties shun soda was a precursor to PepsiCo's focus on healthier products. She recounts working long hours and skipping vacation to dive into the guts of a billion-dollar-plus proposal to overhaul enterprise software, and why it is important for leaders to understand all aspects of what they are approving. Sharing your passion for your job with family is necessary and important, says Nooyi, especially so that children understand why Mom is away: she loves you, but she also loves her work.

Not that family does not figure in Nooyi's workplace. For years, she kept a dry-erase board in her office just for the kids. And she received help in times of crisis, from bosses who gave her paid leave when her father was dying to colleagues who offered to do school pickups.

There are also the ways Nooyi recognized the families of her staffers. She wrote letters to the parents of colleagues to thank them for their role in their child's stellar performance.

Over and over, Nooyi found herself in jobs or situations where she lacked expertise in an industry or product. In response, she had no problem turning to experts.

At Motorola, she recounts, two community-college professors came to her office twice a week, one to explain how automobiles work and the other to discuss "solid-state physics and electronics."

This instinct serves her well over time. At PepsiCo, Nooyi turns to experts in design, science and technology, eventually hiring a chief scientific officer. "Science," she says, "could be at the heart of reimagining the global food system."

At critical junctures in her career, Nooyi also accepted help from some of the men in her life. From bosses and colleagues to her father-in-law and her husband, Nooyi says, these men preemptively jumped in to offer support. Notably, the book puts equal responsibility for balance and caregiving on men.

Nooyi says being a mother is one of her most cherished roles. But one night, after being named president of PepsiCo, she came home and her mother ordered her to go get milk. Annoyed, Nooyi felt she couldn't even revel in this newfound title and success. Her mother replied, "You may be the president or whatever of PepsiCo, but when you come home, you are a wife and a mother and a daughter. Nobody can take your place. So you leave that crown in the garage." Such humility might not be expected of men, but Nooyi accepted it as a small price to keep peace at home.

ERIK TANNER—THE NEW YORK TIMES/REDUX

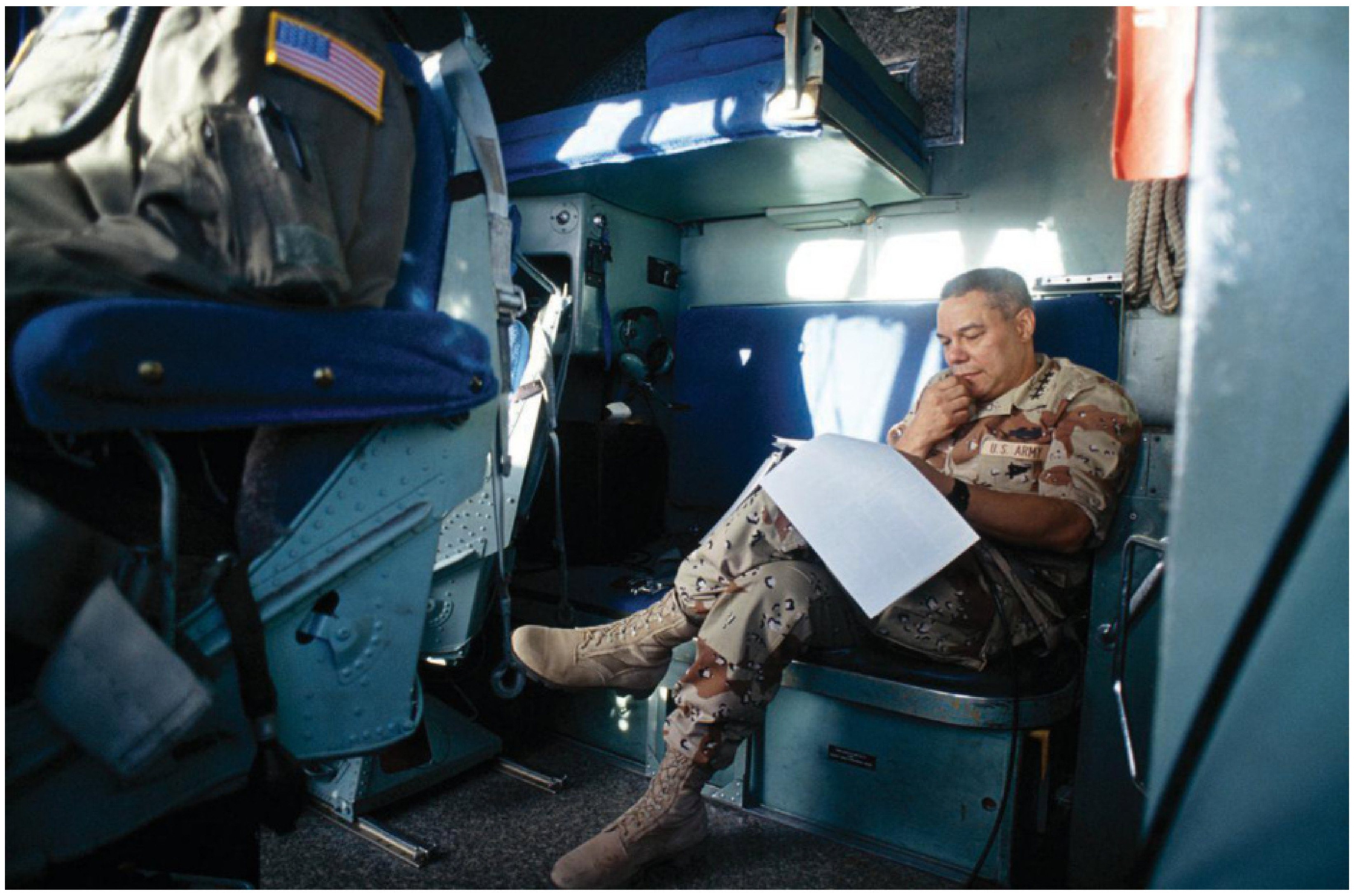
Nooyi's love of the job—from walks on factory floors to battles with activist investors—is apparent and infectious

ROOTED IN A DEEP STUDY of states, companies and countries with more family-friendly policies, Nooyi's book is a call to action—for both prioritizing and training care workers like never before. She cites concern about two related crises. Women leaving the workforce will be disastrous for the economy, she says, as will women choosing not to have children.

PepsiCo's transformation under Nooyi's leadership rested on a concept called Performance with Purpose (PwP). She writes, "PwP would transform the way PepsiCo made money and tie our business success to these objectives: Nourish. Replenish. Cherish." Purpose translates, thus, to not just business objectives but life itself.

Since retiring, Nooyi has worked endless hours on a COVID-19 task force. Her mother—who once said to leave the crown in the garage—seems to have had a change of heart. The need for home and work to accommodate each other might be more needed than ever. "You are someone who wants to help the world, and not many people are like you," her mother said. "I don't think you should worry about the house so much. You have to give back as much as you can."

Kalita is a co-founder and CEO of URL Media, publisher of Epicenter-NYC and columnist for Charter, in partnership with TIME



^
Powell, then Chairman of the Joint Chiefs of Staff, off the coast of Somalia in 1993

DAVID HUME KENNERLY—GETTY IMAGES

REMEMBRANCE

What I learned from Colin Powell

By Marc Benioff

IN MANY WAYS, WE CAME FROM COMPLETELY DIFFERENT worlds. Colin Powell was born in Harlem, was raised in the South Bronx and, as a young ROTC cadet in the late 1950s, endured the injustice of the segregated South. I was born in San Francisco and grew up in the 1970s amid the Summer of Love and marches for women's rights, where neighbors proudly flew rainbow flags.

He rose through the ranks of the military and Washington with a deep respect for institutions, hierarchy and tradition. I first made my mark building adventure games for the Atari 800 and later by starting my own software company in an industry that celebrates innovation and breaking old models with new, transformative technologies.

But when our paths unexpectedly crossed in 1997, Colin Powell helped change the way I see business and the role of companies in the world.

I was in Philadelphia for the Presidents' Summit for America's Future, chaired by Powell and his nonprofit, America's Promise, dedicated to lifting up at-risk youth. I was a 32-year-old Silicon Valley techie looking for inspiration, and I've never forgotten what the former general said when he took the stage: "This is a time for each and every one of us to look into our own heart, to look into our own community, find someone who is in need, find someone who is wanting, find someone who is looking up to us, and for each and every one of us to reach down, to reach back, to reach across, to lift up a fellow American and put him on the road to success in this wonderful country of ours."

Powell told us that day that business could do more than simply make money. We had to be a force for good and a platform for change. It was the best advice I'd ever heard, and in the years that followed, he became one of the most important mentors in my life.

IN 2014, I INVITED General Powell to join Salesforce's board of directors. I wanted our company to benefit from his wisdom, his expertise and the core values that guided his extraordinary life.

He served on our board for seven years. With his military discipline, he never missed a call. I came to appreciate the qualities that Presidents of both parties clearly valued in him—his integrity, his honesty, his pragmatism and his focus on problem-solving. He called me Marc, but I always called him Sir.

General Powell knew that at this moment in history, when there is so much public mistrust in institutions, leaders need to make trust one of their highest values. He was the first to admit that he wasn't perfect. He acknowledged mistakes, held himself accountable and demanded the same of others. He spoke out courageously when he felt our nation or its leaders were falling short of our ideals.

General Powell knew that to build trust, companies need a purpose beyond profit. He knew business could not sit on the sidelines in the march for equality. As a board member, he often joined our all-hands conference calls with many of our 75,000 employees. On one call, after the brutal murder of George Floyd, he recalled being a young soldier fighting in Vietnam while his wife Alma, back home in Birmingham, Ala., guarded their house at night from racist mobs led by police chief Bull Connor. "We've come a long way," he told us, "but we've got a very long, long way to go yet."

Today, many CEOs struggle with how to have a purpose beyond profit. Many Americans feel we're hopelessly divided as a country. Yes, these are difficult days. But I share Colin Powell's perpetual optimism. Because if we need a lodestar for how to live and work and serve others, we could ask for no greater example than the trailblazer from the South Bronx who taught us to embrace our duty to one another—as neighbors, as Americans and as fellow human beings.

General Powell knew that to build trust, companies need a purpose beyond profit

---

Benioff is the co-owner of TIME and the chair and CEO of Salesforce

TheView Essay

Letting go

By Emily Ratajkowski

GROWING UP, I BELIEVED THAT MY THOUGHTS HAD AN effect on everything, from the role I would get in the school play, to what my future would hold, to how tall I would grow.

This habit of magical thinking has persisted. Some of my superstitions: If I plan a trip, I will be sure to get a modeling or acting job that conflicts. If I dream of someone, I expect to hear from them soon. If I share good news before it's official, it won't come to pass. My latest belief is that if I keep my son's name on my body, on a necklace or a bracelet inscribed with his initials, he will remain healthy.

If there is something, anything, I can do to steer the outcome of events, then I am less vulnerable. I am less afraid. Even as I confess this, I worry about the jinx I am placing on my rituals. Will my tricks no longer work now that I have shared them?

I often struggle to delineate what is my gut instinct and what is my hypervigilant, superstitious mind playing tricks on me. A logical part of me knows that events are not affected by supernatural forces that I control. Still, I want to believe in some kind of magic, in some kind of power.

FOR YEARS I'VE HAD the same recurring nightmare. I am screaming, my face sticky with tears. A figure looms in front of me. We are always located in some place from my memories: on the street where I grew up or in an apartment I left long ago. No matter the setting, one thing is consistent: my rage. I yell. I sob. I want this person to recognize my anguish. Eventually, I move to strike them, but my arms are impossibly heavy as I raise my fists. When a fist finally connects, there's no impact, as if my body is made of nothing.

When I repeat this dream to my therapist, she listens intently and expressively—as therapists do—before she speaks. "How about you come in and break some things?" she says.

On the roof of her New York City building, she places a glass bowl filled with water balloons on the ground before me. "Oh no," I grimace, "I already hate this." I think about her pouring the water into the balloons for me before my arrival and shudder with humiliation.

"I've done this before," she offers charitably. "You have to make yourself . . . big!" She throws open her arms and spreads her legs, widens her mouth into a large *O*. Her kindness makes me feel ridiculous and, more than anything, pathetic. The level of self-involvement, I think. Has it really come to this? I am surprised to find hot tears spurting from my eyes. I laugh, embarrassed, quickly wiping one away.

"Why are you crying?" she asks.

"This is just so silly," I say.

"I don't think you're crying because this is silly." She crouches down to the bowl and selects a balloon. I take it, noting its fragility in my hand.

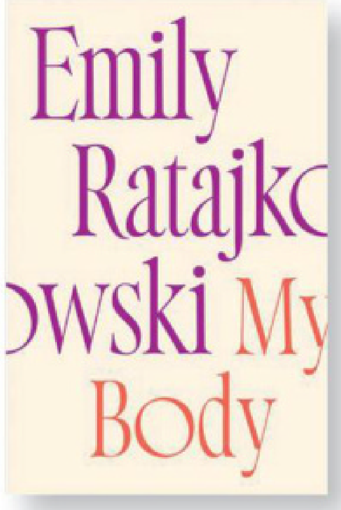
I read once that women are more likely than men to cry when they are angry. They are afraid of their anger; embarrassed by the way that it transforms them. An angry woman is the worst kind of villain: obnoxious and ugly, full of spite and bitterness. I do anything to avoid those feelings, anything to stop myself from being that woman. Instead, I try to make anger seem spunky and charming and sexy. I fold it into something small, tuck it away. I invoke my most reliable trick—I project sadness—something vulnerable and tender, something welcoming, a thing to be tended to.

When I throw the balloon against the wall, it pops with a gentle snap, and I am aware of a vague sense of annoyance. "I'm not sure this is doing much," I remark.

She hands me a small jar. "I don't think it is made of glass, so it might not break."

I take the jar and throw it. My arm is like limp spaghetti. I try again. It bounces. I imagine someone looking out their window to see a skinny woman throwing an object at a brick wall. Pathetic, I repeat in my head. I think about what I must look like to the neighbors and to my therapist. I understand that embracing anger means relinquishing that control, that assessment, that distance from myself, but I am desperate for control. I would rather hurt myself—metaphorically stab myself—than let anyone else hold the knife. And I do not trust my own body to take the reins.

"I'm just not strong enough," I mutter.



My Body *grapples with womanhood and power*

EMMA MCINTYRE—GETTY IMAGES

"Sometimes it helps to think of someone you want to punish," she tells me. I hate that there is anyone I want to punish, but I exhale and close my eyes. I block out thoughts of how stupid I feel, how silly I must appear. Let go.

This time the jar flies out of my hand, as if charged with some kind of current. It smacks against the wall and smashes into little pieces. I look back at my therapist, shocked.

"The body knows," she says, reaching for a broom.

NO ONE KNOWS what exactly triggers a woman's body to go into labor. In my pregnancy, I learned that despite the confidence of doctors who act as if there is no mystery or magic in our physical lives, this is something for which we have no clear explanation. At one of our final appointments, my husband S asked our OB who decided when it was time: the baby or my body.

"Probably both?" she answered vaguely, studying her beeper.

Six days before my due date, at nearly midnight on a Sunday in March, my water broke. Earlier in the day, we'd driven to the Upper West Side for our favorite bagels and whitefish salad as a reward for putting the finishing touches on the nursery. On the drive home, I'd asked S if we were ready. "Hell yeah we are," he'd said, squeezing my knee.

"I know it's scary," I hummed later, sitting alone on our red couch, my hands on my belly. "But we'll do it together." I wasn't sure if I was addressing my son or my body. Probably both.

The rush of warmth between my legs interrupted my sleep and I sat up straight in the bed. I threw the covers off to reveal a growing wet spot on the sheet. The soft light of the TV cast a shadow on my belly, making it look like a crescent moon.

"It's happening," I exclaimed, leaping up.

As S scrambled to get everything ready to leave for the hospital, I labored on all fours, staring at the checkered tile of our bathroom. My body felt like it was cracking open; the pain was all-encompassing, rippling through my core and spreading to every corner of my being. The contractions were coming without a break, and as one peaked, I felt gripped by sudden panic. I was desperate to make the pain stop, but I was trapped. I bit down, clenching my teeth.

"There is no going back," I said to myself, resting my forehead against the cold floor and lacing my hands behind my neck. I tried to remember to breathe. What would happen now to my baby and me? Our lives were on the line, but there was nothing I could do to ensure our safety. Our survival depended on the mysterious mechanisms of my body.

Someone had told me that in order to dilate, a woman's brain waves have to slow down and reach a similar state to orgasm. It was odd to think about sex at the moment of childbirth, but as another contraction seared down my spine, it was a relief to remember that my body was capable of pleasure and release. I tried to fill my mind with blankness. I let the contraction consume me.

Suddenly a new sensation: trust. My body had gotten me this far, hadn't it? It was resilient. It had sheltered my growing son for nine months and kept his heart beating while his entire, complicated self developed inside me. Now it was opening up, right on schedule.

I knew then that I had to let go. Despite my fear, I calmed. I surrendered.

When we arrived at the hospital, I crawled through the lobby and contorted against the elevator wall. At the delivery ward, a woman asked me my name while I crouched down next to a chair, pushing my head against its arm. I was there but not really. I was inside my body, a machine that was tearing along viciously with no regard for anything or anyone. I concentrated, refusing to let my brain interrupt my body's workings from functioning. It knew what to do. I just needed to stay out of the way.

My body knew what to do. I just needed to stay out of the way

THE SUN ROSE an hour before it was time to begin pushing. Pink and orange light filtered through the blinds into the hospital room. Striped shadows splayed across the walls. As I pushed, I asked for a mirror. I wanted to see my body. I wanted to witness its progress.

I threw up in a small plastic container that a nurse held to my mouth. Everything was bright. There was no color—just white light. It was morning; the city was waking up. I thought about the coffee being consumed, the hot showers, the lovers saying their goodbyes from a night spent together. Millions of people went about their rituals as they prepared their bodies for another day of life. Birth is as unremarkable as any of those small events: at all times, there is a woman's body in labor. It is both so extraordinary and so common, the way our bodies take us through our lives.

I felt a stab in my pelvis and through my lower back. The contractions guided the room; their rhythms determined everything. I announced each time when one began to peak, and the nurse, doctor and S rushed to get into position next to me and then, like a tide, receded and dispersed again. I was rewarded with every push: a respite from the pain and then a glimpse of the top of my son's head.

In the mirror positioned above me, I no longer recognized my face: it was puffy and red, and the veins at my temple were pronounced and throbbing. My body was swollen and raw and unfamiliar. Everything had transformed. My baby's heartbeat crackled through the monitor.

I heard a voice say something about how it had been too long, that the baby was too big and I was too small. "May have to get the vacuum," the doctor said. No, I thought.

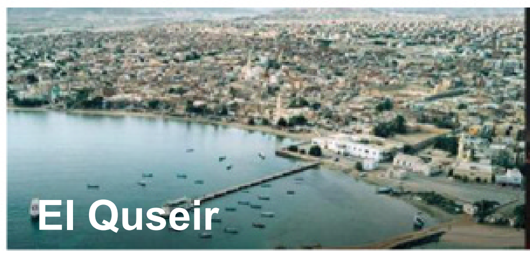
"Push," S said, holding my head in his hands and pressing his forehead to mine. I shut my eyes. I thought of what the nurses had said as encouragement: "You get to meet your son soon." I'd never understood when people described birth as a meeting, but now I did.

I felt him, his body on my chest, but more acutely his presence in the room. In a daze, I held him to me. Of my flesh, I thought. The mirror was pushed to the side, but I could still see the place where he emerged. My body.

Ratajkowski is the author of My Body, *from which this essay is adapted*

EGYPT THE LAND OF WONDERS

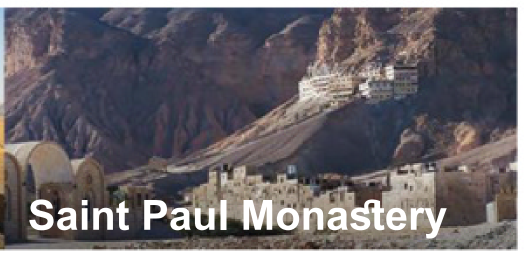
A PROSPEROUS ECONOMY RESILIENT TO COVID-19


El Quseir

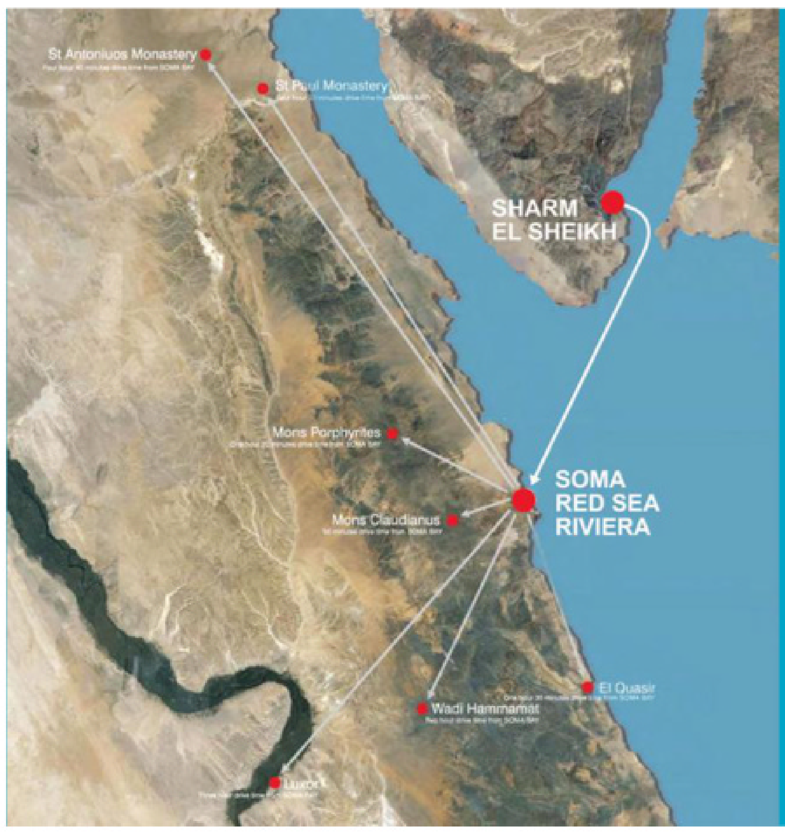
Luxor

Red Sea

Mons Claudianus


Saint Paul Monastery

The Egyptian government is proceeding with the implementation of Egypt Vision 2030, an ambitious economic reform plan. The economy has started to pick up. Even during the COVID-19 pandemic that stalled economic growth on a global scale, Egypt is among the few countries that showed growth in 2020, which is expected to continue through 2021 and beyond while inflation and unemployment rates have remained low. The Central Bank of Egypt gradually reduced interest rates, which has had a positive impact on businesses and the increased confidence has led to currency flotation and the flow of remittances through banking channels and away from the black market. Egypt enjoys a number of key advantages that are sure to be attractive to foreign investors: a strategic geographical location, developed infrastructure, a diversified economy and growing demographics. A young population, coupled with the increase in GDP, is driving growth in disposable income and consumption, transforming Egypt into a consumer market of significant importance in the region. Tourism, though, is the backbone of the Egyptian economy and the government has been investing in tourism infrastructure and extending support to the investors and developers in this sector, all resulting in more tourist arrivals than ever.



COASTAL RESORTS ON THE RED SEA FULLY INTEGRATED ALL YEAR LONG DESTINATIONS

Resorts on the Red Sea offer magical scenery, with crystal blue pristine waters, white sandy beaches and a tremendous underwater wealth of fauna and flora. An all-year destination, statistics show a remarkable increase in the popularity of coastal resort projects in Egypt, especially on the Red Sea. These resorts provide a safe environment with proximity to the Gulf countries and Europe. Destinations such as Sharm El Sheikh and Hurghada are experiencing a strong revival, especially now that the Russian and British governments have lifted travel bans for tourists traveling to Egypt. The area boasts international airports and a modern network of roads. Meanwhile, a high-speed rail under construction will connect Hurghada to the Cairo, Luxor and Aswan -- and other historical sites.

Citystars Soma Red Sea Riviera Resort

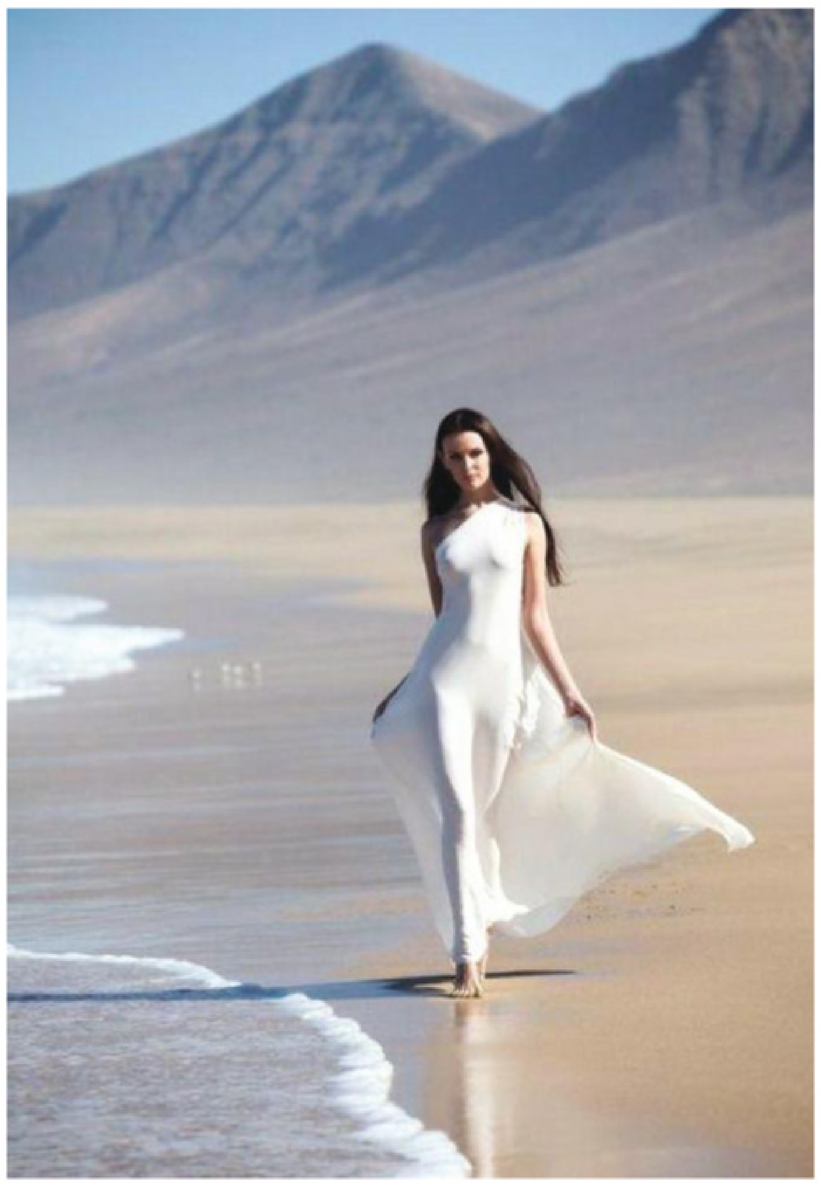
(Project under construction - Opening 2023)

With land area of almost four-square miles and commanding a unique location along the Soma Gulf Coast, south of Hurghada, Citystars Soma Red Sea Riviera Resort will be one of the largest tourism developments on the Red Sea.

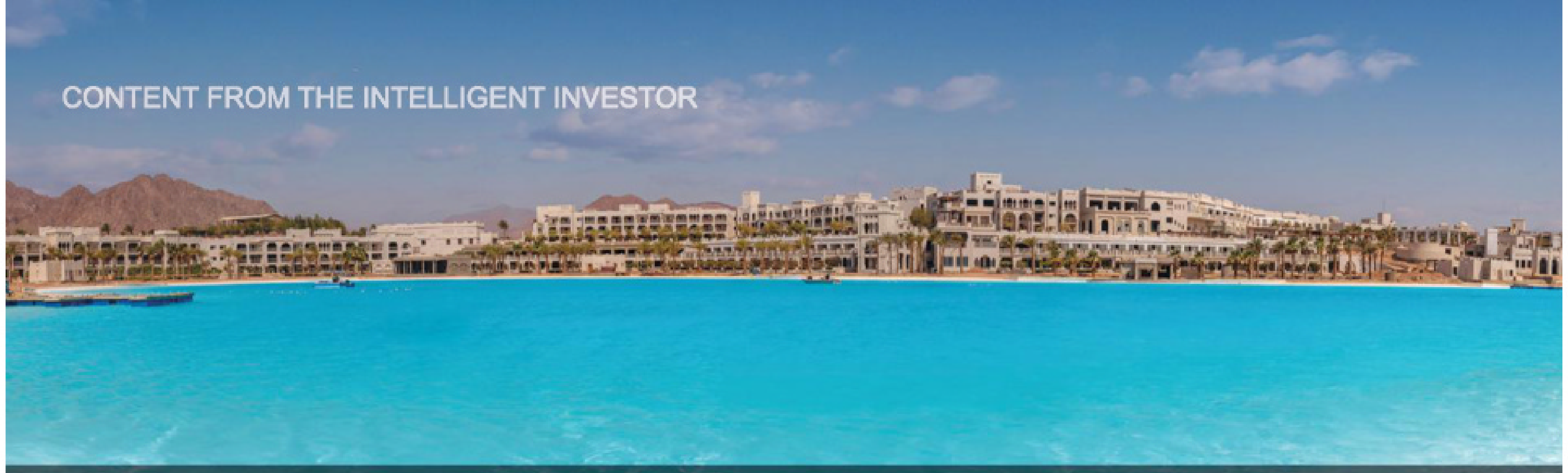
The site includes one and a quarter miles of magnificent white sandy beaches and crystal-clear waters. The project will be a fully integrated beach resort offering all types of resort real estate, a multitude of large lagoons with sandy beaches and water sport and recreational activities. There will also be diving centers, wellbeing venues, a destination for leisure, entertainment, retail, and night life.

The project will feature some of the world's most recognized international hotel resorts and branded residences, offering some of Egypt's most exclusive lifestyles for today's discerning global travelers and quality seeking residents. Under construction is the Fairmont Citystars Soma Red Sea Riviera Resort with 300 keys,100 branded apartments and 50 branded villas for sale. There will be a riviera-like promenade with a 5-star hotel resort and branded apartments, retail, food and beverage and leisure activities. This wealth of selection overlooks a 3 million square foot lagoon.

Also planned is a marina covering an area of almost a million square feet that will accommodate over 150 boats of different sizes and be able to host super yachts of up to 300 feet in size. The area around the marina will be alive with restaurants, cafe bars, entertainment venues and a 5-star hotel and resort with branded apartments. There will also be an 18-hole signature golf course with fantastic views of the coastline. Future phases of the project will also offer many lagoons, resort hotels and related amenities and a large number of second homes, apartments and villas.



CITYSTARS®
SOMA-RED SEA RIVIERA



Citystars Sharm El Sheikh Actual Site 2021 (Phase I Under Construction)

Citystars Sharm El Sheikh Resort (Opening 2022)

Beach Resort Experience Revisited

Citystars Sharm El Sheikh is the largest tourist destination in Sharm El Sheikh. It is a fully integrated resort strategically located 200 feet above sea level and overlooking a nature reserve with a more than half-mile long beachfront. The resort is situated in the most prestigious area of Sharm El Sheikh, at Nabq Bay, home to the newest high-end hotels and tourist developments, and with the airport only 10 minutes away. Guests will enjoy breathtaking views as the sun rises from the sea, with the project overlooking Tiran Island and the Red Sea. The setting sun illuminates the dramatic mountain and desert scenery that sit behind the project. The project covers an area of three square miles and includes 13 million square feet of pristine blue lagoons and 13.5 miles of white sandy beaches around the lagoons. The first of many lagoons is already built and has been awarded the Guinness Book Record as the world's largest man-made lagoon, covering an area 1.3 million square feet. The lagoon is navigable and offers a safe sunbathing and swimming environment, along with many types of recreational, water sports and entertainment activities, water shows and spectacles.

Strategic relationship with Accor Hotel and Lifestyle Group, the fastest growing hospitality company, offering luxurious hotels, quality self-contained tourism environments with spas and wellness centers and unique fully furnished second homes - branded residential. Sitting at the center is the Crystal Lagoon with white sandy beaches – all designed to attract Egyptian, Pan-Arab, European and Asian tourists and visitors.

Fairmont Citystars Sharm El Sheikh Hotel and Resort *Opening in June 2022*
A 415-room luxury property and 316 branded apartments.

ACCOR

Fairmont

swissôtel

Swissôtel Citystars Sharm El Sheikh Hotel and Resort *Opening 2023*
388 rooms and 386 branded apartments.

"La Croisette" Leisure & Retail Promenade
The upcoming entertainment hub of Sharm El Sheikh will be part of phase one of Citystars Sharm El Sheikh. This promenade along the lagoon features a cluster of cafes, pubs, restaurants, performance venues and exclusive shops.

Leisure Island "La Voile Rouge" Citystars Sharm El Sheikh Accessible only by boat, La Voile Rouge is already built at the heart of the lagoon and offers an exclusive beach club, lounging decks, café bar, restaurant and rooftop and open-air nightclub.

Light & Sound Spectacular at Citystars
Dive into Egypt's history, heritage and culture with Citystars Sharm El Sheikh's spectacular light and sound show, which employs the latest digital and real-time technology.

Signature Golf Course
Designed by Sir Colin Montgomerie, a spectacular international class 18-hole signature golf course at Citystars Sharm El Sheikh.

Tennis Academy and Educational Facilities.
The project will offer an international tennis academy and extensive educational facilities.

Banqueting and Conference Venues
International class banqueting and conference facilities, indoor and outdoor, the largest of which will be the Banquet Island located in the center of the largest lagoon.

Hassan Sharbatly
Vice Chairman
Citystars Properties

"Building on our experience, we will be Creating Living Landmarks that will participate in redefining the tourism and real estate industry in Egypt."

Coming Up Soon: 2025 onwards
Ultra-luxury resort under design, 245 hotel rooms and 100 standalone super luxurious villas, overlooking the signature golf course, the big blue 5.5 million square-foot lagoon and the mountains as a backdrop. A variety of unique branded and non-branded villas and apartments, a new downtown waterfront destination, educational and wellbeing facilities, plus another 200-room five-star Sanctuary Hotel located next to the nature reserve overlooking the Red Sea.

Many Exclusive Experiences in One Trip
The upcoming state-of-the-art infrastructure, ferry lines and high-speed trains will offer holidaymakers the opportunity to take a day trip from Citystars Sharm El Sheikh Resort to Citystars Soma Red Sea Riviera Resort and visit timeless Egyptian historical sites like Luxor, Aswan, El Quseir, Saint Paul Monastery and many other destinations on the Red Sea and all the way up to Citystars El Sahel Resorts on the Mediterranean.

CITYSTARS®
SHARM EL SHEIKH

GUINNESS WORLD RECORDS
RECORD HOLDER

THE LARGEST CRYSTAL LAGOON IN THE WORLD

CHAMBER OF

CONSCIENCE

◀

SONNENFELD ADDRESSES ATTENDEES AT THE YALE CEO SUMMIT IN DECEMBER 2019 AT THE ROOSEVELT HOTEL IN NEW YORK CITY

How CEO whisperer Jeffrey Sonnenfeld mobilized business leaders to dump Trump—and helped shape the new era of "woke capitalism"

By Molly Ball

THE CEOS STARTED CALLING BEFORE PRESIDENT Trump had even finished speaking. What America's titans of industry were hearing from the Commander in Chief was sending them into a panic.

It was Nov. 5, 2020, two days after the election, and things weren't looking good for the incumbent as states continued to count ballots. Trump was eager to seed a different narrative, one with no grounding in reality: "If you count the legal votes, I easily win," he said from the lectern of the White House Briefing Room. "If you count the illegal votes, they can try to steal the election from us."

The speech was so dangerously dishonest that within a few minutes, all three broadcast television networks spontaneously stopped airing it. And at his home in Branford, Conn., the iPhone belonging to the Yale School of Management professor Jeffrey Sonnenfeld began to buzz with calls and texts from some of the nation's most powerful tycoons.

The CEOs of leading media, financial, pharmaceutical, retail and consulting firms all wanted to talk. By the time Tom Rogers, the founder of CNBC, got to Sonnenfeld, "he had clearly gotten dozens of calls," Rogers says. "We were saying, 'This is real—Trump is trying to overturn the election.' Something had to happen fast."

For decades, Sonnenfeld has been bringing business leaders together for well-attended seminars on the challenges of leadership, earning a reputation as a "CEO whisperer." A committed capitalist and self-described centrist, he has informally advised Presidents of both parties and spoke at Senate GOP leader Mitch McConnell's wedding. Now he suggested the callers get together to make a public statement, perhaps through their normal political channels, D.C. industry lobbies such as the U.S. Chamber of Commerce and the Business Roundtable (BRT). But the CEOs wanted Sonnenfeld to do it; the trade groups, they fretted, were too risk-averse and bureaucratic. And they wanted to do it right away: when Sonnenfeld, who issues invitations for his summits eight months in advance in order to secure a slot on CEOs' busy calendars, suggested a Zoom call the following week, they said that might be too late.

The group of 45 CEOs who assembled less than 12 hours later, at 7 a.m. on Nov. 6, represented nearly

PHOTOGRAPH BY DONOVAN MARKS

MICHAEL DELL
DELL

JUAN LUCIANO
ARCHER DANIELS MIDLAND

PHEBE NOVAKOVIC
GENERAL DYNAMICS

one-third of *Fortune*'s 100 largest companies: Walmart and Cowen Inc., Johnson & Johnson and Comcast, Blackstone Group and American Airlines. Disney's Bob Iger rolled out of bed at 4 a.m. Pacific time to join, accompanied by a large mug of coffee. (Sonnenfeld, who promised the participants confidentiality, declined to disclose or confirm their names, but TIME spoke with more than a dozen people on the call, who confirmed their and others' participation.)

The meeting began with a presentation from Sonnenfeld's Yale colleague Timothy Snyder, the prominent historian of authoritarianism and author of *On Tyranny.* Snyder did not beat around the bush. What they were witnessing, he said, was the beginning of a coup attempt.

"I went through it point by point, in a methodical way," recalls Snyder, who has never previously discussed the episode. "Historically speaking, democracies are usually overthrown from the inside, and it is very common for an election to be the trigger for a head of state or government to declare some kind of emergency in which the normal rules do not apply. This is a pattern we know, and the name for this is a coup d'état." What was crucial, Snyder said, was for civil society to respond quickly and clearly. And business leaders, he noted, have been among the most important groups in determining whether such attempts succeeded in other countries. "If you are going to defeat a coup, you have to move right away," he says. "The timing and the clarity of response are very, very important."

A lively discussion ensued. Some of the more conservative executives, such as Blackstone CEO Stephen Schwarzman, wondered if the threat was being overstated, or echoed Trump's view that late ballots in Pennsylvania seemed suspicious. Yet others corrected them, pointing out that COVID-19 had led to a flood of mail-in ballots that by law could not be counted until the polls closed. By the end of the hour, the group had come to agreement that their normal political goals—lower taxes, less regulation—weren't worth much without a stable democracy underpinning them. "The market economy works because of the bedrock foundation of the rule of law, the peaceful succession of power and the reserve currency of the U.S. dollar, and all of these things were potentially at risk," former Thomson Reuters CEO Tom Glocer tells TIME. "CEOs are normally hesitant to get involved in political issues, but I would argue that this was a fundamental business issue."

The group agreed on the elements of a statement to be released as soon as media organizations called the election. It would congratulate the winner and laud the unprecedented voter turnout; call for any disputes to be based on evidence and brought through the normal channels; observe that no such evidence had emerged; and insist on an orderly transition. Midday on Nov. 7, when the election was finally called, the BRT immediately released a version of the statement formulated on Zoom. It was followed quickly by other trade groups, corporations and political leaders around the world, all echoing the same clear and decisive language confirming the election result.

Sonnenfeld thought the hastily convened "Business Leaders for National Unity," as he'd grandly dubbed the 7 a.m. call, would be a one-off. But Trump's effort to overturn the election persisted. So in the ensuing weeks, the professor called the executives together again and again, to address Trump's attempt to interfere with Georgia's vote count and the Jan. 6 Capitol insurrection. "This was an event which violated those rituals of America and created a visceral reaction," Nick Pinchuk, CEO of the Kenosha, Wis.–based toolmaker Snap-on, tells TIME. "Talking about this, it kind of transformed from the realm of politics to the realm of civic duty. CEOs wanted to speak out about this, and Jeff gave us a way to do that."

To Sonnenfeld, the effort—much of which has not been previously reported—underlined a generational shift taking place in the collective civic attitudes of the CEO class. Its effects are evident in Washington, where Big Business's longtime alliance with the Republican Party is foundering. Congressional Republicans have divorced the Chamber of Commerce; the GOP's corporate fundraising is diminished; Fox News anchors and conservative firebrands rant about "woke capital" and call for punitive, anti-free-market policies in retaliation. Many of the companies and business groups that implacably resisted Barack Obama have proved surprisingly friendly to Biden, backing portions of his big-spending domestic agenda and supporting his COVID-19 mandates for private companies. Political observers of both parties have tended to attribute these developments to the pressures companies face, whether externally from consumers or internally from their employees. But Sonnenfeld, who is in a position to know, argues that just as much of it comes from the changing views of the CEOs themselves.

Snyder, the scholar of authoritarianism, believes the CEOs' intervention was crucial in ensuring Trump left office on schedule, if not bloodlessly. "If business leaders had just drifted along

'THEY CHOSE IN THAT MOMENT TO SEE THEMSELVES AS PART OF CIVIL SOCIETY.'

—Timothy Snyder, historian

MARK FIELDS
FORD
GREG HAYES
UNITED TECHNOLOGIES
KENNETH FRAZIER
MERCK
DENISE MORRISON
CAMPBELL SOUP

A BUSINESS COUNCIL CONVENED BY TRUMP, PICTURED IN FEBRUARY 2017, BROKE UP WITHIN MONTHS

in that moment, or if a few had broken ranks, it might have gone very differently," he says. "They chose in that moment to see themselves as part of civil society, acting in the defense of democracy for its own sake."

IT WAS PERHAPS INEVITABLE that Trump, the corporate-showman President, would force the private sector to reconsider its duty to society—and that Sonnenfeld would be the one to force the issue. For 2020 was not the two men's first confrontation. Back in the mogul's reality-TV days, the business guru was a harsh critic—before burying the hatchet and giving Trump the idea for *Celebrity Apprentice.*

A Philadelphia native, Sonnenfeld, 67, was drawn from an early age to the human side of business. "He was always irrepressible, uninhibited—just a barrel of monkeys," recalls the public relations guru Richard Edelman, who rowed crew with Sonnenfeld at Harvard. "You always knew he would be either a politician or a professor, not one of the gray-suited soldiers coming out of Harvard Business School."

Sonnenfeld authored several scholarly publications before his 1988 book, *The Hero's Farewell: What Happens When CEOs Retire,* became a surprise best seller. CEOs sought his counsel, and he realized they were starving for such insights: surrounded by subordinates and yes-men, powerful executives had plenty of opportunities to pontificate but few venues for learning from their peers. Yet Sonnenfeld's interest in leadership psychology was unfashionable in an M.B.A. field focused on the technical workings of companies and markets. Denied tenure at Harvard, he started his "CEO College" at Emory University in 1989. After a decade, he moved it to Yale, where his Chief Executive Leadership Institute helped put its School of Management on the map. Today, Sonnenfeld's executive seminars have many imitators, including CEO summits put on by *Forbes, Fortune,* Bloomberg and the New York *Times.*

When *The Apprentice* premiered in 2004, Sonnenfeld reviewed it for the *Wall Street Journal.* The show, he wrote, was teaching aspiring leaders precisely the wrong lessons while fueling public disdain for business. "The selection process resembles a game of musical chairs at a Hooters restaurant," he wrote. "No new goods or services are created, no business innovations surface, and no societal problems are solved." A real-life leader who tried to run a business that way would quickly fail, he added.

Trump fired back, insulting Sonnenfeld as a know-nothing academic. But he also tried to win him over, offering Sonnenfeld the presidency of Trump University, which he turned down, and an invitation to his Westchester golf club, which he accepted. Over lunch, Sonnenfeld said he'd stop criticizing the show if the players were cranky B-list celebrities instead of earnest young strivers. Trump liked the idea, and the following season he transitioned to an all-celebrity cast.

Sonnenfeld finally gave in to Trump's pestering and invited him to one of his CEO summits at New York's Waldorf Astoria hotel. "You would have thought it was the Pope, people were so amazed," Sonnenfeld recalls. "But at the same time, the top tier of CEOs told me, 'When he walks in, we're walking out.' And they did." After Trump won the presidency, Sonnenfeld paid him a visit at Trump Tower and reminded him of the incident. "Funny thing about that, Jeff," Trump said, "they're all coming by here now."

Over the course of the 2016 campaign, Sonnenfeld's surveys of his seminar participants found that although around 75% identified as Republicans, 75% to 80% supported Hillary Clinton, he says. And while many were optimistic about Trump's pro-business Administration, their enthusiasm soon dimmed. It wasn't just the chaotic way he operated; he seemed determined to pit them against one another. "I started hearing from the

PREVIOUS SPREAD: YALE SCHOOL OF MANAGEMENT; THIS SPREAD: OLIVIER DOULIERY—BLOOMBERG/GETTY IMAGES

18+

WHAT IS
AVAXHOME?

AVAXHOME -

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open https://avxlive.icu

▲ SONNENFELD WITH TRUMP IN 2016; WITH BIDEN IN 2018

CEOs of Lockheed and Boeing, saying, 'Wait, he's trying, over chocolate cake at Mar-a-Lago, to get a fight going between us over the cost of a fighter jet,'" Sonnenfeld recalls. It was the same with Ford vs. GM, Pfizer vs. Merck.

Sonnenfeld realized Trump was repeating the tactics from *The Apprentice,* the same zero-sum mentality that had buoyed him to political success: divide and conquer. "Trump's whole modus operandi, his one trick his whole life, is to break collective action," Sonnenfeld says. "The whole NAFTA battle was pitting Canada against Mexico. He constantly tried to divide France and Germany, the U.K. vs. the E.U., Russia vs. China. He tried to build up Bernie vs. Hillary, just like he did with the Republican primary candidates. As pathetically puerile a device as it is, with the GOP it worked magnificently well."

But business leaders, unlike the Republicans, banded together to resist. In August 2017, when Trump opined that there were "very fine people on both sides" of the deadly white-supremacist march in Charlottesville, Va., Merck CEO Kenneth Frazier, who is Black, announced that he would step down from Trump's American Manufacturing Council. Others—some prodded by Sonnenfeld behind the scenes—quickly followed. Within a few days, that council, along with another business advisory group, had disbanded. It was, Sonnenfeld says, the first time in history that the business community turned its back on a President's call to service.

"He lost the business community in Charlottesville," says Matthias Berninger, who heads public affairs for Bayer. "Ken leaving his council, that was the starting point of everything that followed." Deregulatory actions Trump expected Big Business to appreciate were rebuffed: oil and gas companies publicly opposed his repeal of methane regulations, and many utilities shrugged off his rollback of CO_2 limits. The auto industry united against Trump's attempt to eliminate mileage standards, only to be investigated by the Department of Justice.

Trump's antagonism to immigration and free trade ran counter to business's interests, says the D.C. corporate fixer and former GOP strategist Juleanna Glover. "Many corporations and CEOs had an abiding fear of being attacked in a Trump tweet, so staying out of Washington was a good risk-mitigation strategy," she says. "The Republicans have largely abandoned their pro-business values, and it's hard to negotiate in good faith when one of the parties is seen as continuing to undermine democratic values."

TRUMP MAY HAVE BEEN the catalyst. But the recent shift of the corporate class is only the latest in the long history of Big Business's dance with Washington.

While many remember the robber barons of the Gilded Age, the same era produced a generation of innovative entrepreneurs (Thomas Edison, Luther Burbank) who were folk heroes. "The business leaders of the early to mid-1900s were the original 'progressives,'" Sonnenfeld says. "They were for infrastructure, sustainability, safe workplaces, urban beautification, immigration." Midcentury CEOs saw themselves as patriotic industrialists, allies of government and builders of society. During the World Wars, they famously answered the call to contribute. Republican President Dwight Eisenhower appointed three sitting CEOs to his Cabinet.

By the 1970s, pollution and price-fixing scandals had tanked Big Business's image. A few CEOs decided to break with the conservative politics of the U.S. Chamber of Commerce and the National Association of Manufacturers and came together to found the BRT. But the succeeding generation, in Sonnenfeld's view, didn't live up to the BRT's original promise of civic virtue, focusing instead on attacking government interference and avoiding taxation. "It wasn't that we had a few bad apples," Sonnenfeld says. "There's something wrong with the whole orchard in that period."

The tech bust, corporate scandals such as Enron and the 2008 financial crisis pushed Americans' esteem of business to historic lows. When the Obama Administration tried to get health care companies on board with the Affordable Care Act, not a single member of the industry came to the table. "They were like little kids throwing stones and hiding in the hedges," Sonnenfeld says. "The business community was not trying to solve problems."

But over the past decade, Sonnenfeld believes, a new generation of leaders has stepped into the public sphere to do well by doing good. In 2015, opposition from corporations like Eli Lilly and Anthem helped kill a proposed Indiana state law that would have allowed businesses to refuse to serve gay people. The following year, American Airlines, Microsoft and GE were among the companies

COURTESY JEFFREY SONNENFELD/YALE SCHOOL OF MANAGEMENT (2)

protesting a North Carolina ordinance barring transgender people from using their preferred bathrooms. Similar bills were defeated in Texas and Arkansas. The business leaders who thwarted these efforts weren't just stereotypically "liberal" corporate behemoths like Apple, Starbucks and Nike, Sonnenfeld notes. "It was the bedrock of traditional American industry in the heartland: UPS, Walmart, AT&T. They're the ones who led the charge, saying, 'This is not America. We don't want our workforces divided over this.'"

Today, Wall Street firms grade companies on their climate and diversity initiatives as well as their balance sheets. In the wake of the 2018 mass shooting in Parkland, Fla., both Dick's Sporting Goods and Walmart announced they would no longer sell assault weapons or ammunition. Dozens of companies cut ties with the NRA. In 2019, the BRT revised its charter to redefine "the purpose of a corporation," saying companies should be accountable not only to their shareholders but also to the wider array of "stakeholders," including customers, employees, suppliers and communities.

"The role of the CEO has changed, and I don't think anyone can sit on the sidelines," says Paul Polman, the London-based former CEO of the consumer-goods giant Unilever, whose new book, *Net Positive,* argues that sustainability can go hand in hand with profit—one of a raft of recent do-gooder tomes by CEOs (including Salesforce CEO Marc Benioff, the co-owner of TIME). Under Polman's leadership, Unilever set ambitious climate goals and sought to improve its human-rights record, lobbying against the death penalty for gay people in Uganda and deforestation in Brazil. "Smart CEOs realize that their business cannot function in societies that don't function," Polman tells TIME. "We have to be responsible and speak up, not just lobby in our own self-interest."

Skeptics on the left see this kind of talk as cynical posturing. Democratic Senator Elizabeth Warren denounced the BRT's "stakeholder" announcement as an "empty gesture," and former Labor Secretary Robert Reich called it a "con." Many of the statement's signatories, liberals note, still preside over abysmal working conditions, environmental violations and racially segregated workplaces, while employing armies of lobbyists to resist government attempts to hold them accountable.

The right has revolted as well. GOP Senator Marco Rubio decries "woke corporate hypocrites," while Trump has taken up the slogan "Go woke, go broke!" In the new book *Woke, Inc.,* Vivek Ramaswamy, a tech entrepreneur turned self-styled class traitor, decries "corporate America's game of pretending to care about justice in order to make money."

The public, too, appears skeptical. In recent research conducted by Edelman, 44% of Americans say they trust CEOs to do the right thing, about on par with government leaders (42%) but lagging behind clergy (49%) and journalists (50%). A far greater share, nearly three-quarters of employees, trust the CEO of the company they work for.

IN THE SPRING OF 2020, as the spread of COVID and Trump's attempt to undermine the vote began to raise fears of an election meltdown, Sonnenfeld began privately raising the issue with prominent CEOs. He urged

TRUMP WAS REPEATING HIS TACTIC FROM *THE APPRENTICE:* DIVIDE AND CONQUER

them to promote political participation to their employees and customers. For the first time, thousands of companies gave millions of workers paid time off to vote and volunteer at the polls. By October 2020, you could scarcely visit a retailer or open a mobile app without encountering a pro-voting, nonpartisan corporate message.

After the CEOs' Nov. 7 statement, many—including Sonnenfeld—assumed their work was done. Despite Trump's refusal to concede, dozens of courts rejected his challenges, all 50 states certified their electoral votes, and the presidential transition began. But on Jan. 3, the Washington *Post* published a recording of Trump's phone call to Georgia secretary of state Brad Raffensperger, in which he cajoled and berated the election official to "find" the nearly 12,000 votes it would take to reverse his loss of the state.

So on Jan. 5, Sonnenfeld reconvened his executives. This Zoom was better attended than the first, with nearly 60 CEOs—and more concerned. Nobody quibbled with the "coup" terminology this time. There were CEOs Sonnenfeld had never met who had demanded invites after hearing about the November call. There were right-wing executives and former Obama and Bush Cabinet secretaries. The group voted unanimously to suspend donations to the GOP members of Congress who contested the election.

The next day, Jan. 6, validated their fears. In the aftermath of the Capitol riot, the group met again, and this time, 100% of the CEOs favored impeachment, Sonnenfeld says. The National Association of Manufacturers, known as the most conservative of the major trade lobbies, subsequently called for impeachment publicly, to the political world's astonishment. Nearly a year later, 78% of the companies that pledged to withhold donations have kept true to their word, according to Sonnenfeld's analysis of the latest campaign-finance data. One D.C.-based fundraiser for Republican candidates tells TIME she has virtually given up seeking money from corporate PACs as a result.

Sonnenfeld's efforts didn't end with Biden's Inauguration. He was particularly disturbed by the election law the Georgia legislature began considering in the spring, one of many GOP-backed measures to make it harder to vote and easier to interfere with vote counting in future elections. In 1964, it was the former president of Coca-Cola who publicly shamed the white Atlanta business community into honoring Martin Luther King Jr. after he won the Nobel Peace Prize. Now Georgia's 34 *Fortune* 1000 companies were largely silent in the face of a modern civil rights issue. In late March, Sonnenfeld and a former UPS executive penned a joint *Newsweek* op-ed calling out their "cowardice."

On a subsequent Zoom, two leading Black executives, Merck's Frazier and Kenneth Chenault of American Express, got more than 100 fellow CEOs to sign on to a statement opposing the Georgia voting law, which was published as a full-page ad in the New York *Times* and Washington *Post*. "The people who signed the letter did so because they didn't see it as a partisan issue," Frazier tells TIME. "They felt, as business leaders, that they shouldn't stand on the sideline when our fundamental rights as Americans are at stake."

But these moves also sparked a political backlash. Executives who had interceded during the election's aftermath began to fall away from the group, leery of liberal activists seeking to apply similar pressure on other issues, like Texas' new abortion law. The coalition that rallied with such alacrity to defend American democracy now appears splintered, unsure of the extent of the continuing threat or how to confront it.

"I really thought Jan. 6 was a turning point, a tipping point, but now I think maybe it was just an inflection point," says Mia Mends, the Houston-based CEO of Impact Ventures at global food-services giant Sodexo. Companies including hers that spoke out against voting restrictions in Texas faced threats of retaliation from state GOP officials. "When that day of reckoning comes, on what side will you be? On what side were you?"

44% OF AMERICANS TRUST CEOS TO DO THE RIGHT THING, ON PAR WITH GOVERNMENT LEADERS

THERE HAVE BEEN no more pop-up Zooms. Sonnenfeld is back to his old grind, gathering CEOs and nudging them toward public-spiritedness. On a recent Tuesday in New Haven, he led a frenetic virtual discussion with the leaders of Starbucks, United, Xerox, Dell, Pepsi, Kellogg's, Duke Energy and others, along with members of Congress and current and former Administration officials from both parties. Adam Aron, the CEO of AMC Entertainment, dialed in from his bedroom, looking disheveled, only to be hit with an aggressive Sonnenfeld question about whether the tech-stock mania that had sent his company's value skyrocketing was really a scam.

Sonnenfeld understands that the CEOs feel whipsawed by the political chaos. "They're being pelted with so many different causes," he tells me after the Zoom, his town car speeding to the airport so he can make a board meeting in Miami. But he is scathing in his contempt for financiers who have ostentatiously embraced socially conscious investing while failing to speak up on voting and democracy issues. "The sheer, screaming cowardice of these institutional investors—they own 80% of corporate America, and they never miss a stage to proclaim their commitments to [environmental and social justice]," he says. "Where are they now? Why are they the last to take a stand?"

Yet Sonnenfeld has no doubt that having stepped up for democracy at a crucial time, the CEOs would do it again. "The GOP has created these wedge issues to divide society, and the business community is saying, 'Wait a minute, that's not us, those are not our interests,'" he says. "That doesn't mean they're going to rush off and support Bernie Sanders and the Democratic Party. But they're trying to break free and find their own way." —*With reporting by* SIMMONE SHAH *and* JULIA ZORTHIAN ☐

CORINTHIA HOTEL
CORINTHIA HOTEL

Illustrated by Quentin Blake

Kerridge's Bar & Grill
Corinthia London

Laurent-Perrier

Cuvée Rosé, chosen by the best.

Laurent-Perrier
CUVÉE ROSÉ
CHAMPAGNE
Laurent-Perrier
MAISON FONDÉE
1812
BRUT

CHAMPAGNE
Laurent-Perrier
MAISON FONDÉE
1812

MAISON FAMILIALE INDÉPENDANTE

champagnelaurentperrier www.laurent-perrier.com
Photo credit: Iris Velghe / Illustration credit: Quentin Blake / Conception Luma

drinkaware.co.uk
for the facts

Whitney Green doesn't see herself returning to an office; after four years as a community therapist, she quit to move to Rome and is living off her savings

They quit. Now what?

YOUNG PEOPLE ARE LEAVING THEIR JOBS IN RECORD NUMBERS—AND NOT GOING BACK

By Raisa Bruner

LIFE FOR WHITNEY GREEN LOOKS A LITTLE DIFferent these days. She wakes up to the sounds of Rome: scooter engines echoing off cobblestones, the lilting chatter of café patrons collecting their morning espresso shots. She goes to Italian classes in the afternoons. She eats bowls of pistachio gelato and handmade pasta, and watches tourists congregate at the Trevi Fountain and Piazza Navona. She's teaching herself to play keyboard and building a website for her dream job—her own telehealth practice. It's a far cry from her past life as a community mental-health therapist for at-risk youth in San Francisco, a job she quit in June to move to Italy with her girlfriend.

Green is one of millions of Americans leaving traditional jobs this year—and choosing not to recommit to clocking in at all. This is the highest mass resignation the U.S. has seen since 2019, pre-pandemic, and the numbers are still rising. In June, 3.9 million quit. In July, it was another 3.9 million. In August, 4.3 million. The numbers are even more notable for young workers: in September, nearly a quarter of workers ages 20 to 34 were not considered part of the U.S. workforce—some 14 million Americans, according to the Bureau of Labor Statistics, who were neither working nor looking for work. For some, it's burnout. For others, the timing was ripe to refocus on side projects as the stresses of the pandemic started to wane. And for many, especially in a service sector dominated by "zillennials" (those in their late 20s on the border of Gen Z and millennial), poor treatment and low wages became unsustainable. Green represents one slice of that: she's a 31-year-old with a master's degree who decided to step back from earning income to take a self-imposed sabbatical and live off savings before working for herself one day. Meanwhile, there are an estimated 10.4 million jobs in the U.S. that remain unfilled, as this exodus—dubbed the Great Resignation—offers young workers time to nurse the wounds of pandemic burnout and untenable working conditions with dramatic life changes.

"This is a revolution, not a resignation," says Ifeoma Ezimako, 23, who resides in Washington, D.C. A former hospitality worker and bartender, Ezimako was fed up with ill-tempered patrons and extra-low wages while working her last service job in March 2020; she had worked in service for five years, but enough was finally enough. As the behavior of customers deteriorated during the pandemic, she and her co-workers opened their eyes to the daily injustices of tipped work, she says. (A common experience: being asked to pull her mask down so patrons could see her face "to decide how much to tip.") To her, the money just wasn't worth the stress. She quit to refocus on herself, studying for a sociology degree with her family's support. Now she volunteers with One Fair Wage, an activist organization that helps service industry employees organize for better standards.

The leisure and hospitality sector has the lowest median age of any industry, at 31.8 years, and today, Saru Jayaraman, president of One Fair Wage, says about half of surveyed service-industry workers say they plan to quit in the next year. Jayaraman is cautious in aligning this movement with that of white collar workers trading jobs for "funemployment." "Maybe among white collar workers, it's just people quietly resigning, but among service workers, they are organizing," she says. "They are saying, I love this industry, but I will not come back unless there are permanent wage increases." Even though many

PHOTOGRAPH BY STEPHANIE GENGOTTI FOR TIME

NOW HIRING
DELIVERY AVAILABLE THROUGH GRUBHUB UBEREATS POSTMATES
HELP WANTED
HELP WANTED
SE SOLICITA PERSONAL
NOW HIRING FOR OUR GROWING BUSINESS
SEE STORE FOR DETAILS
NOW HIRING
APPLY INSIDE
BAR & GRILLE
NOW HIRING SERVERS
HELP WANTED
OPEN
NOW HIRING
TJ·maxx
NOW HIRING
215 - 840 - 1077

Over 10 million jobs are unfilled in the U.S.; signs like these, in New Jersey and Pennsylvania, paper the country

MICHELLE GUSTAFSON

can't afford to stop working, she says, they've drawn a line in the sand, thanks to the light-bulb moment of pandemic-precipitated challenges accessing unemployment assistance, worsening income inequality and newfound leverage due to staffing shortages.

There is a distinction between the experiences of Ezimako and Green. But both are part of a broader societal shift, wherein young workers are prioritizing their self-worth.

Now, for the first time in their careers, young people have the ability to do so. Workers like Green, who had well-paying jobs leading into the pandemic, have a greater sense of financial comfort after spending less and saving more during the past 19 months, says Harvard economist Lawrence Katz. Plus, the abundance of open jobs may—counterproductively—make workers feel more confident dipping out of the workforce. Katz cautions that this is less about young workers leaving the labor market entirely, but instead about "trying out new things, and taking advantage of new opportunities and not sticking with the old bargain."

The pivot to remote work has also made possible a level of work-life balance that those in their 20s and early 30s—the first generation where half of kids had two parents working full-time—had never imagined. That's especially true for millennials; a 2020 Gallup poll showed 74% did not want to return full-time to offices, the highest of any age cohort. Millennial women are particularly likely to stay home given the need for childcare flexibility. Over 309,000 women dropped out of the workforce in September alone. "Childcare is a piece that people have been underestimating for a while," says Alicia Sasser Modestino, an economist at Northeastern University. Even before the pandemic it was a crisis; now, with day-care-center closures and—ironically—staff shortages for these very jobs, women may have no choice but to stay home, indefinitely.

FOR OTHERS, REMOTE WORK just isn't fulfilling enough. When Emma Grace Moon quit her marketing agency job in June, she was ready to disentangle herself from a structure that held her back. "I felt like I could exceed my trajectory way faster if it was in my hands, rather than reporting every year, every month, with a quarterly check-in. I felt like I could be making more and also growing way faster if I just did it myself," she says. These days, Moon—who is just 22, having skipped college—goes it alone as a consultant. She's making three times her former income, she says from her Brooklyn apartment; her area of expertise, working with direct-to-consumer brands, was primed for pandemic-era growth. She now also has the flexibility to travel and make her own hours, even if that often looks like working all the time instead of 9 to 5.

Someone like Moon doesn't quite fit the typical understanding of the employment market in the U.S.; as an independent worker, she's not filling an available job listing. But with six clients and counting, she's certainly not underemployed and doesn't see herself shifting back to working for someone else, ever. "It's allowed me a lot of time to think and process and make better decisions than I probably would if I had the pressure of a management team," she says. Plus, the anxiety of depending on others for income is long gone. "I've had PTSD from past roles where I've seen people get fired out of the blue, or I've been fired before," she says, citing the instability of startups where many white collar Gen Z and millennial workers gravitate.

The burnout of startup culture is common. Seattle-based engineer Cory Gabrielsen, 30, quit his job as the second employee at an agriculture technology startup in April. The travel demands were intense; he spent 14-day stretches on site visits overseeing robotic farm equipment, with requirements he calls "pretty insane." After two years on the job, he was ready for time off. For several months after he quit, he says he did "nothing," recovering from burnout.

Now, he spends his days option trading, running a Twitter bot account that tracks Ethereum pricing, and dabbling in Web3 and cryptocurrency investments. And while he wouldn't describe himself as happier now—he misses the social interaction of an office—his mood is more "neutral" day-to-day, and he looks forward to building his presence as an independent entity who can do what he wants when he wants. "I have no stress on the job compared to what I used to do," he says. He's not working full-time and has no concerns about money, thanks to his savings, investments and a boom time in the crypto world. "My goal is not to go back to having a boss," he says.

ECONOMISTS PREDICT THAT the Great Resignation is only getting started, especially for Gen Z and millennial workers who are well positioned to find new ways to earn income. A former colleague of Gabrielsen's quit the same day he did and has since moved to Amsterdam. Moon and Green say many of their friends have sought advice on how to shift away from their nine-to-fives. Jayaraman warns that, unless the restaurant industry introduces drastic changes, even more young service workers will choose their mental health over income. Without significant government investment in childcare, young mothers will prioritize their families. Whatever their motivation, though, young blue collar and white collar workers alike are finding themselves happier—and more independent. For Green, the change has helped kick-start her dream of a balanced, fulfilling career, which becomes more of a reality with every daily scoop of gelato. —*With reporting by* MARIAH ESPADA ☐

How Liz Shuler, new AFL-CIO chief, plans to seize 'Striketober'

As a vast labor shortage gives workers newfound leverage over their employers, the new president of the nation's largest labor-union federation discusses the tens of thousands of workers seizing the opportunity to strike in October—dubbed "Striketober"—for better benefits.

What has the transition to becoming president of AFL-CIO been like for you in the wake of Richard Trumka's unexpected death?
It has been quite a responsibility to step into some big shoes and to keep this labor movement moving forward. We have such an opportunity in front of us; we can't miss a beat. We've got this opportunity in Congress with all the investment poised to pass and create millions of good, well-paying jobs. And we have workers out in the streets, taking risks and looking for change.

When you were elected, you said you were "honored and ready to guide this federation forward." What does that mean in real terms?
[It means] appealing to the next generation to show them that they can see themselves in our labor movement and rising into leadership, making the change that they want in their workplaces and using the labor movement as a vehicle for that change. To show women and people of color that we make the difference in workplaces and close pay gaps. And that as technology is changing our workplaces and disrupting the business model, we would be the place to have a voice and a seat at the table.

Union membership rates continue to be highest among workers who are ages 45 to 64. What can unions do to recruit and retain younger Americans?
This is the challenge of our time. Something like 10,000 people a day are retiring, and that silver tsunami is about to hit us. We are very much being intentional about engaging our young members. Having young people in leadership helps show other young people that this labor movement is modern, dynamic and is interested in caring about the things they care about.

Union membership is half of what it was in the 1980s. The PRO Act, which would create new protections for unionizing workers, isn't likely to pass the Senate, and some of the country's largest companies are successfully squashing union drives. What gives you hope that "Striketober" is a turning point?
When I walk the picket line with bakery workers and I see their determination, their tenacity, their courage, that's what gives me hope. The PRO Act is very needed, because our labor laws are so broken that it takes an act of absolute heroism to stand up and face down Goliath. We're going to keep fighting for the PRO Act, but we're also going to look for opportunities to get meaningful reforms in other vehicles that are moving. We want to make sure that the penalties for employers who break the law are meaningful. We're working to try to make sure that gets passed in reconciliation. —*Abby Vesoulis*

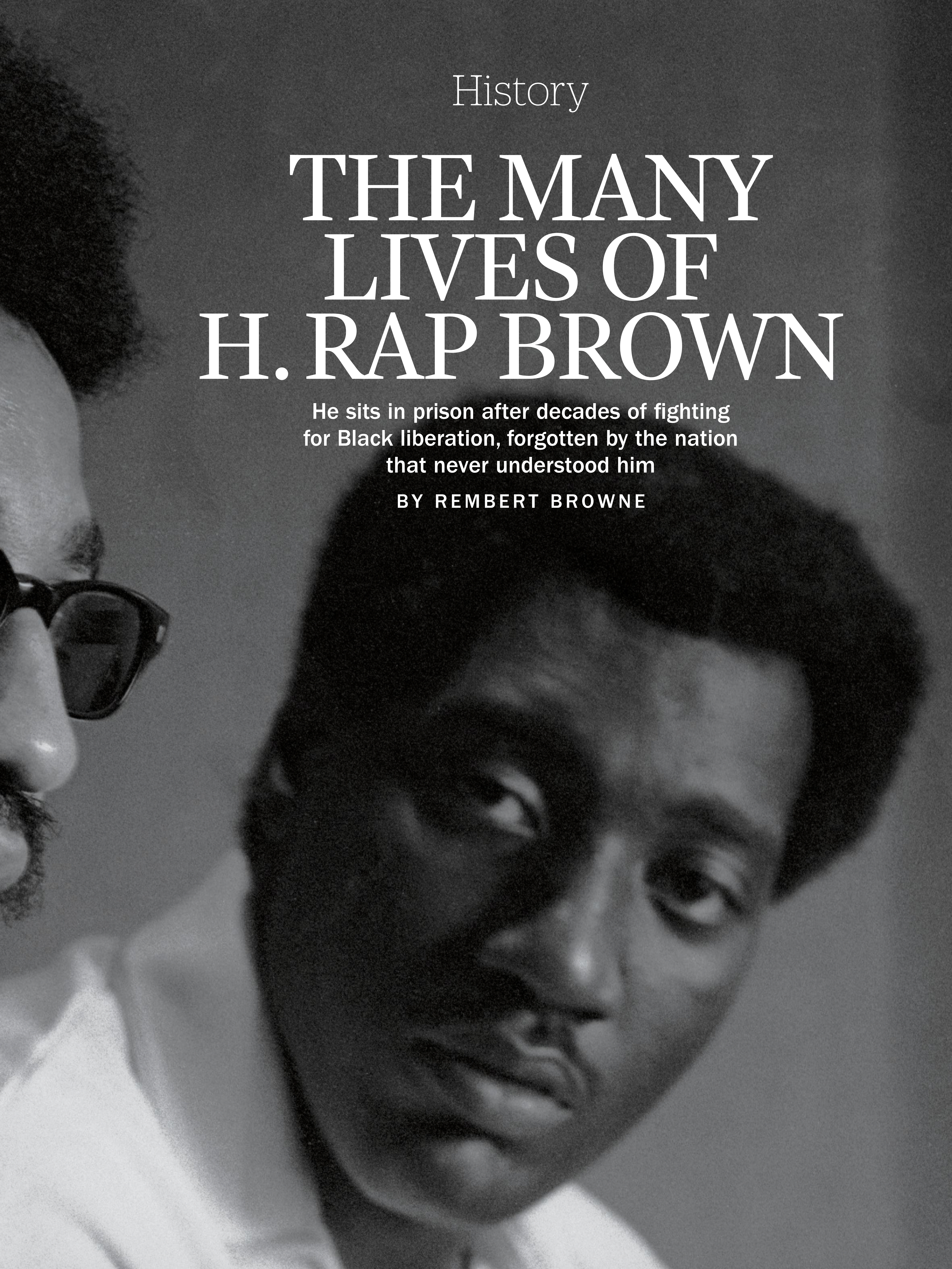
Civil rights activist Dick Gregory, left, and musician Otis Redding flank H. Rap Brown at an August 1967 convention in Atlanta

PHOTOGRAPH BY
VERNON MERRITT III

THE MANY LIVES OF H. RAP BROWN

He sits in prison after decades of fighting for Black liberation, forgotten by the nation that never understood him

BY REMBERT BROWNE



It seemed like a fool's errand to send Jamil Al-Amin a letter,

expecting a response. But there I was, in the summer of 2019, reading his reply, sent from the U.S. Penitentiary in Tucson, Ariz.

Peace be unto those who do Good, Rembert. May The Creator Reward you for your kind thoughts and words. Though this part of our journey is defined by danger, and the goal seems distant, no roads are without endings …

Hope this is a happy day, with sunshine, some quiet, and the feeling that you are being thought of and wished happiness … because you are …

I am enclosing a piece from my book I'm working on, called Holy-Cost … *give it a critical reading, and let me know what you think …*

At this point in the letter, his note took a more personal turn.

You still playing ball?

He signed the letter "Coach." It was the only thing I knew him by, as a 9-year-old, in 1996, staring up at his sinewy 6 ft. 5 in. frame. The location was Adams Park, in a gym on the southwest side of Atlanta. Leaving my first practice with my new team, I sat in the car and listened as my mother explained that Coach Al-Amin was a trailblazer of a Black man. I took that to heart and could tell she was serious by the tone of her voice, but my primary focus was (always) the two-part question of "Where are we eating?" and "Do they have banana pudding?" Also, meeting an important Black elder was part of growing up in Black Atlanta—the trailblazers were everywhere.

But there was something different about Coach. For starters, this was an era that seemed to measure the quality of a male coach by how much he yelled; the more, the better. Even at a young age, I'd been bossed around by my fair share of dads. But Coach Al-Amin existed as this giant of a man, clothed in his traditional Muslim threads, rarely speaking outside of his inside voice. He never screamed while we played, only talking to us like little adults.

As can sometimes happen with someone you know intensely for a period in childhood, I eventually forgot about Coach. Life went on, and sports, once my singular priority, became a hobby after I started college.

A few years into the workforce and it's 2012, the last year I really used Facebook. A thing was happening on the platform, where people would adopt long, multiword, scriptio continua middle-name aliases. That's when I first noticed Kairi "Freemyfather" Al-Amin on my feed, my former coach's son. I was instantly reminded of a man from my past.

I was in high school when Jamil Al-Amin went to prison. Across town, so was Kairi. We were rival point guards.

After seeing Kairi post about his father, I looked up which facility he was in and learned the answer was ADX Florence in Colorado, also known as a "supermax." And while I couldn't fully remember the specifics of the crime or the trial, I knew this to be the 23-hours-of-solitary-confinement-a-day home for the Unabomber, the Oklahoma City bomber and a handful of al-Qaeda operatives. I dove into the story of my coach's life, quickly reminded of what I did know and floored by what I didn't.

My mother didn't raise me to simply know Black history—I was groomed to study it, revere it and envision a world in which I was part of a lineage. So why was I told so little about Jamil Al-Amin, a man crucial to understanding Black liberation? And why, when I brought him up to others, was I often met with blank stares?

Over the years, this is a man they called Jamil Al-Amin, Imam and Rap. A man who has a federal anti-riot act named after him. A man who had a verbal confrontation with President Lyndon Baines Johnson in the White House. That line from the Sugarhill Gang's 1979 classic "Rapper's Delight," "I'm hemp, the demp, the women's pimp/ Women fight for my delight"? It's pulled from his autobiography.

In his story, there's a crescendo to this question of guilt or innocence. *Did he or didn't he?* But after a full examination of his life, a more pressing question emerges: What did Jamil Al-Amin do to piss America off so much?

JAMIL ABDULLAH AL-AMIN was born Hubert Gerold Brown in Baton Rouge, La., in 1943. He was the youngest of three, raised by Eddie, a laborer, and Thelma, a maid and teacher. Brown looked up to his brother Ed, two years his senior, who was the first in the family to venture into activism.

"I knew who I wanted to identify with," he wrote, about early affiliations that would inform his politics, in his 1969 autobiography, *Die Nigger Die!* "It was the bloods in my neighborhood, the guys who hung out down on the corner. The Black community, in other words."

A significant portion of his memoir is dedicated to outlining the nuanced differences between whom he saw as "Black" vs. "Negro." Publishing the book at age 25 under the name H. Rap Brown, he spoke of himself as a Black man who could not be controlled by white or Black people. He was a young man who needed things to make sense, or he would not abide. And he saw Black people who seemed to work on behalf of white supremacy as more of a threat to progress than white people were. "At some point or another, the Black child

PREVIOUS PAGES: GETTY IMAGES; OPPOSITE PAGE: TAMI CHAPPELL—REUTERS

Al-Amin during jury selection while on trial in 2002 on charges of murdering one Fulton County sheriff's deputy and wounding another

begins to challenge this authority, both within Negro America and the big white world when he confronts it," Rap wrote.

Die Nigger Die! is a serious text, written by a hilarious man. He was "a jokester," says Dave Dennis, civil rights activist, member of the Student Nonviolent Coordinating Committee (SNCC) and Brown's high school classmate. Brown was also a standout athlete in both basketball and football. But by 1962, at age 18, he began joining his brother in Washington, D.C., where his work in the civil rights movement officially began. "Ed had great eloquence in the Southern oral tradition, and it was clear that linguistic skill was shared in the Brown family. Because when [Hubert] came to Howard, his nickname was already Rap," says the writer and professor Ekwueme Michael Thelwell, who was at Howard University from 1960 to 1964, serving as the director of SNCC's Washington office in 1964.

In Rap's autobiography, he writes about his younger years, which he says were defined by the art form of signifying: "I learned how to talk in the street, not from reading about Dick and Jane going to the zoo and all that simple shit." It's also filled with rhymes: "Known from the Gold Coast to the rocky shores of Maine/ Rap is my name and love is my game."

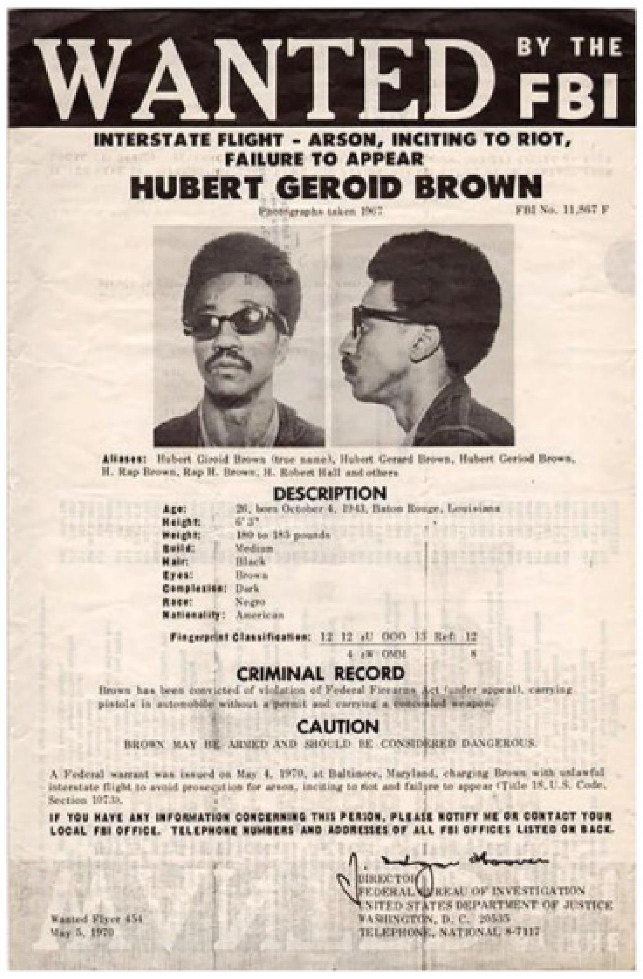
Once this verbal dexterity combined with politics and action, he set out on a new course. He became chairman of the Howard-based Nonviolent Action Group (NAG), even though he didn't attend the university. "I saw my role as one of trying to get college students to identify with the brothers in the street," he wrote. "College students, however, get caught in a trick, because they think that to be accepted by the young bloods, they have to be tough, be a warrior. But all they have to do is show the brother that they respect him and that they recognize that he is a brother. All Black people are involved in the same struggle."

Rap continued to make a name for himself, while not being everyone's cup of tea. This was particularly true in 1965, when he was sitting in the White House, telling LBJ, "I'm not happy to be here."

Less than a week after "Bloody Sunday" on the Edmund Pettus Bridge, Rap joined a multiracial coalition of national civil rights leaders to meet with

1967
Jazz singer Nina Simone with Brown during a surprise visit to a convention in Atlanta

1968
Brown stands with his wife Karima outside a New Orleans courtroom



WANTED BY THE FBI

INTERSTATE FLIGHT - ARSON, INCITING TO RIOT, FAILURE TO APPEAR

HUBERT GEROID BROWN

Photographs taken 1967

FBI No. 11,867 F

Aliases: Hubert Giroid Brown (true name), Hubert Gerard Brown, Hubert Geriod Brown, H. Rap Brown, Rap H. Brown, H. Robert Hall and others

DESCRIPTION

Age: 26, born October 4, 1943, Baton Rouge, Louisiana
Height: 6' 3"
Weight: 180 to 185 pounds
Build: Medium
Hair: Black
Eyes: Brown
Complexion: Dark
Race: Negro
Nationality: American

Fingerprint Classification: 12 12 sU 000 13 Ref: 12
4 sW OMI 8

CRIMINAL RECORD

Brown has been convicted of violation of Federal Firearms Act (under appeal), carrying pistols in automobile without a permit and carrying a concealed weapon.

CAUTION

BROWN MAY BE ARMED AND SHOULD BE CONSIDERED DANGEROUS.

A Federal warrant was issued on May 4, 1970, at Baltimore, Maryland, charging Brown with unlawful interstate flight to avoid prosecution for arson, inciting to riot and failure to appear (Title 18, U.S. Code, Section 1073).

IF YOU HAVE ANY INFORMATION CONCERNING THIS PERSON, PLEASE NOTIFY ME OR CONTACT YOUR LOCAL FBI OFFICE. TELEPHONE NUMBERS AND ADDRESSES OF ALL FBI OFFICES LISTED ON BACK.

J. Edgar Hoover
DIRECTOR
FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535
TELEPHONE, NATIONAL 8-7117

Wanted Flyer 454
May 5, 1970

1970
Brown is added to the FBI's most-wanted list—for the first time

the President. As Thelwell later told it, Rap just happened to be in the SNCC office when the organization needed to sub someone in at the last minute. The meeting left Rap disgusted, by the actions of both President Johnson and the leaders who went to the White House supposedly to push for change.

In his memoir, Rap wrote, "The dude from the NAACP got up and said, 'Mr. President, it really is a pleasure to be here. This will be something that I'll be proud to tell my children and grandchildren about.' Then came another fool and he said the same thing." By the time it was Rap's turn to talk, he was fed up. "I think it's unnecessary that we have to be here protesting against the brutality that Black people are subjected to." He wasn't done. "And furthermore, I think that the majority of Black people that voted for you wish that they had gone fishing."

At 21, Rap was becoming a man who had no time for civility, who would say what everyone else was thinking, damn the consequences. He understood what white America had done to a large portion of Black people, who understood being agreeable as a path toward salvation, while secretly starving for action. From that moment, Rap offered Black people a different type of leader, one who spoke seemingly without fear.

By the spring of 1967, he was elected chairman of SNCC, which had become an increasingly militant organization, following in the footsteps of Stokely Carmichael. And by July, he was in Cambridge, Md., speaking at a rally.

The year 1967 was one of more than 150 race riots. It was the year the phrase *When the looting starts, the shooting starts* was popularized by Walter Headley, then the police chief of Miami, more than a half century before it was brought back into the public consciousness by Donald Trump in response to protests after the murder of George Floyd. It was the year COINTELPRO, a program started by the FBI, would target a group of "Black Messiahs" (Rap included) who could "unify, and electrify, the militant black nationalist movement." And it was the year Rap's relationship with law enforcement began its rocky road.

Rap was speaking on top of a car, above a crowd in Cambridge, as attendees cheered him on. "We are going to control our community. We ain't going to have the honky coming over here and appointing five or six nigger cops to come down here and ruin our community. That's Black Power." He went on. "Newark exploded. Harlem exploded. Dayton exploded. Cincinnati exploded. It's time for Cambridge to explode, baby."

The cheers only intensified. "They say, if Dayton don't come around, we're gonna burn Dayton down. Black folks built America. If America don't come around, we should burn it down."

After the speech, as Rap walked an attendee home, he was struck by police buckshot and was rushed to get medical attention. Hours later, Cambridge started to burn. Most of the national news portrayed Rap as the catalyst. We would later learn, from a once buried memo from the Kerner Commission report, that investigators determined that the real blame lay with the Cambridge police chief, for his "emotional binge in which his main desire seems to have been to kill Negroes."

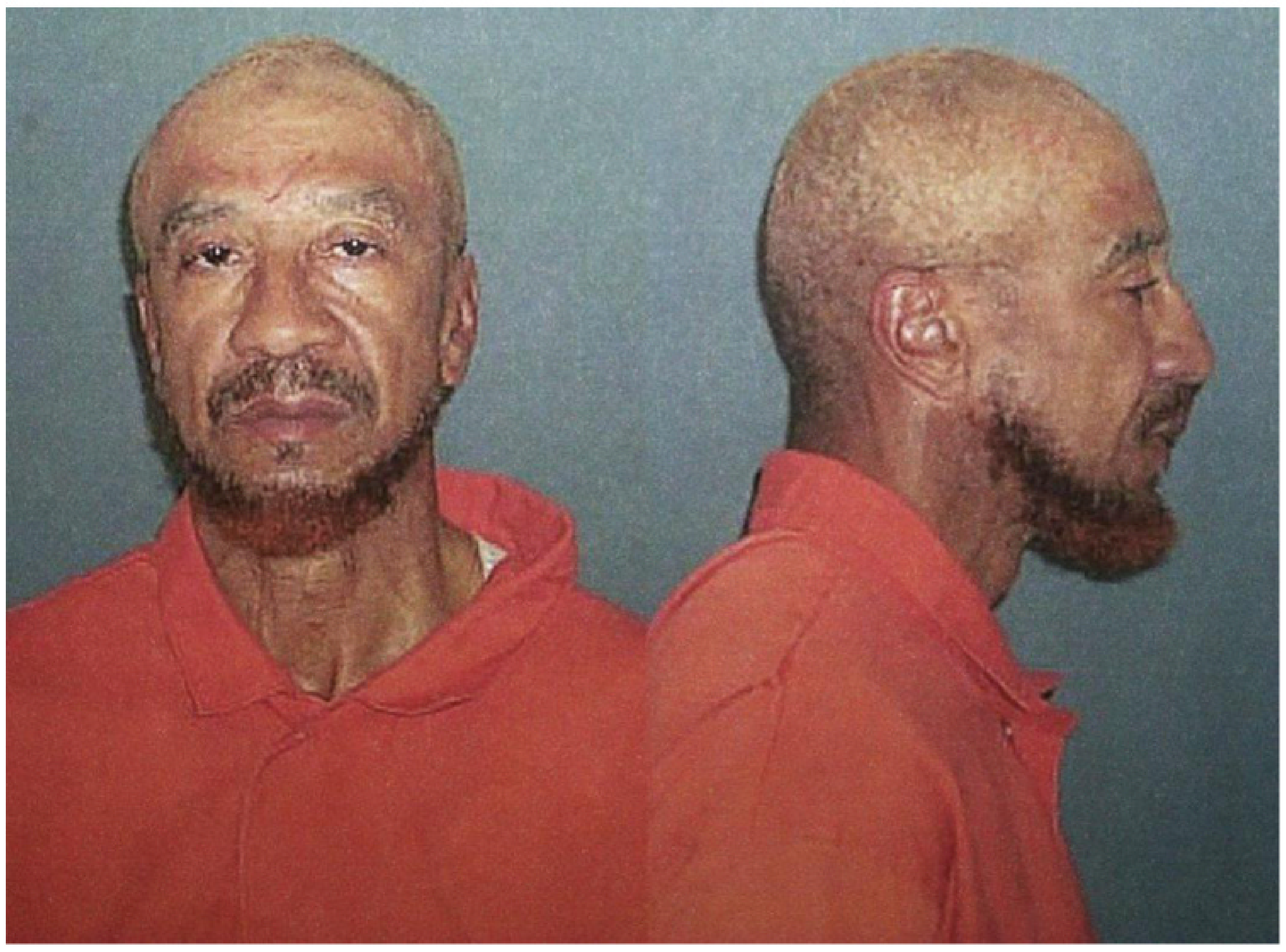
A fugitive warrant was out for Rap's arrest, and ultimately he was charged by the state of Maryland with inciting a riot. What followed, as described by Peter B. Levy in his book *The Great Uprising,* was Rap being "arrested, released from jail, and rearrested on at least eight separate and unrelated charges over the next four years."

Rap's lawyer was William Kunstler, the man who would later be best known for defending the Chicago 7. He argued that the U.S. government had a clear vendetta against his client, claiming "vindictive and unrelenting efforts to destroy him." Another attorney argued that the COINTELPRO practices were in full bloom, stating that it wasn't actually about any cases against Rap sticking, but rather more to slow momentum, "so that the wellsprings of social action can't move in a directed form."

By 1970, his trial for the incident in Cambridge was finally set to start. Rap, who was now 26, did not appear. In May,

Why was I told so little about Jamil Al-Amin, a man crucial to understanding Black liberation?

1976
Stokely Carmichael, LeRoi Jones and Al-Amin at Michaux's, a bookstore in Harlem



2000
Al-Amin's mug shot after he was accused of shooting two Georgia deputies

FROM LEFT: AP (2); FBI; JAMES E. HINTON—LIBRARY OF CONGRESS; REUTERS

the FBI added him to its most-wanted list, where he stayed for 18 months. In October 1971, in a standoff with police, he was shot and apprehended. He spent the next two years awaiting trial in a variety of prisons, including Rikers Island and the Manhattan Detention Complex, known as "The Tombs." Once he was sentenced, Rap spent five years in Attica.

KARIMA AL-AMIN met her future husband in Harlem, one week after he was shot in Cambridge.

The daughter of a woman who managed the payroll for the NAACP Legal Defense Fund, she spent her early life much closer to the traditional civil rights movement. "I became the babysitter for Thurgood Marshall and most of the African American judges and lawyers in that whole circle," says Karima, now an immigration attorney. "So by the time I met Imam Jamil, that was my background."

Jet magazine announced their March 1968 nuptials under the headline SHE'S WITH HIM, with a photo of the couple outside a federal court in New Orleans, his hand on her shoulder, her Afro larger than his. In three years, however, Rap would be in prison and no longer known as H. Rap Brown.

It didn't happen overnight. He was invited to partake in Jumu'ah, the Islamic Friday prayer, and joined. Speaking with *City Paper* in 1992, he recalled that Malcolm X made him more curious about Islam, and that as his interest grew, he began to see the religion as a "continuation of a lifestyle," noting "it became evident that to accomplish the things we had talked about in the struggle, you would need a practice."

Upon his release in October 1976, H. Rap Brown, now known as Jamil Al-Amin, settled with Karima in Atlanta, where she had moved while he was incarcerated. It was there, in the neighborhood of the West End, that he became an organizer again, building a small Muslim community, opening a grocery store and eventually being chosen as the imam.

"We came to be good friends from playing ball because a lot of people couldn't whoop him down there," says Chad Russell, Al-Amin's friend for more than 30 years, on their basketball-playing days in the neighborhood. For hours, we sat on the corner near Al-Amin's old store, as Russell told stories about the area's transformation. He sold fruit and sandwiches to passersby, situated across the street from a mural of Al-Amin, dressed in all white and praying, that was painted during the pandemic.

For a second time, Al-Amin was an unlikely leader. But it was different this time. His loud, often profane way had been exchanged for a more docile demeanor. In 1993, he penned a scholarly book on the foundations of Islam. But evident from the title, *Revolution by the Book,* these changes did not result in a fully new man.

"In terms of being able to speak truth to power," says Akinyele Umoja, professor of African American studies at Georgia State University. "That element of him had not been compromised."

Professional athletes flocked to him, no matter where he lived. Karima remembers cooking when Kareem Abdul-Jabbar would come to town. "And if he didn't come to eat, the imam would take the food to him, and then I would look at the game on TV and hope that he doesn't cramp over my food," Karima says.

And that community was only a fraction of his influence. Because you may evolve, and you may grow up, but you don't just lose the cool. Even as he left behind "H. Rap Brown," the growing popularity of rap music meant a new generation was discovering his words.

"When I became an MC in 1977, anyone who was rapping tried to gain an edge on the competition by dipping into places where you wouldn't think others would find rhymes," says Davey D, a journalist and hip-hop historian who grew up in the Bronx in the 1970s. "Some people dipped into the Mother Goose rhymes, some people knew about Dolemite or Blowfly. I knew about H. Rap Brown, so, quite naturally, he was going to be my direct influence as an MC."

"Coming up, hip-hop was such a young art form," says Killer Mike, rapper and activist from Atlanta. "Rapping in the '60s and '70s was cats talking that sweet shit, or highly informed politicized jive, but it sounded good. So I always thought he had the coolest name in the world with H. Rap Brown. I thought his name was the most revolutionary shit."

Going back to their time as a couple in Harlem, the Al-Amins had always attracted Black people who spoke up, from Nina Simone to Muhammad Ali. Al-Amin also inspired unique corners of Black thought, gracing the cover of Nikki Giovanni's book of poems *Black Judgement* in 1968. Olympians Tommie Smith and John Carlos, the runners who famously raised Black Power fists at the 1968 medal ceremony, studied his words.

"Back in the '60s, and football players in particular, if they weren't getting what they wanted with management, they would come to him," Karima says. "He would go and just stand there, and they would end up getting what they wanted."

By the mid-'90s, Al-Amin's status as an international leader had only grown. But that revolutionary tag, while inspiring to some, was a threat to many, especially those who never let him out of their sights, even after decades out of the spotlight.

From 1992 to 1997, the FBI closely surveilled Al-Amin, generating 44,000 documents.

"He's a Muslim. He's a former militant. He doesn't fit in with the good Negroes that are trying to work within the system," says former Black Panther chairwoman Elaine Brown, who is writing a book on Al-Amin.

"H. Rap Brown is a damn pariah."

ON AUG. 7, 1995, Al-Amin was arrested in Atlanta. Through a joint mission of the FBI, the Bureau of Alcohol, Tobacco, Firearms and Explosives, and local police, he was charged with felony aggravated assault for shooting a man outside his grocery store. The victim initially labeled Al-Amin as the shooter. Weeks later, he reversed his claim, claiming that the police and federal agents had pressured him to say it was Al-Amin, even though he told them, "I said I didn't see who did it." The charges were dropped.

On May 31, 1999, Al-Amin was pulled over in a north Atlanta suburb, on the grounds of driving a car the police claimed was stolen. He said he'd bought it earlier in the month. Eventually, he and his car were searched, and the officer found a badge. When questioned if he was a police officer, Al-Amin said he was, in the same city where the car was registered: White Hall, Ala.

On March 16, 2000, sheriff's deputies Aldranon English and Ricky Kinchen arrived at Al-Amin's grocery store. They were there to serve a warrant regarding his failure to appear in court for the 1999 charges of impersonating an officer, receiving stolen property and having no proof of insurance. When the officers got out of the car, a man appeared next to a black Mercedes, and gunfire was exchanged. Both English and Kinchen were hit multiple times, with English surviving and Kinchen dying the next day.

In the days that followed, English said that the assailant was shot, which a trail of blood at the scene seemed to confirm. He also said, after seeing a photo lineup of suspects, that the man was Al-Amin.

A hunt for Al-Amin began. He was an FBI most-wanted fugitive, again. Four days later, he was captured in White Hall. In the town's woods, the police retrieved a rifle that was a part of the shoot-out with deputies English and Kinchen, as well as a bullet-hole-filled black Mercedes.

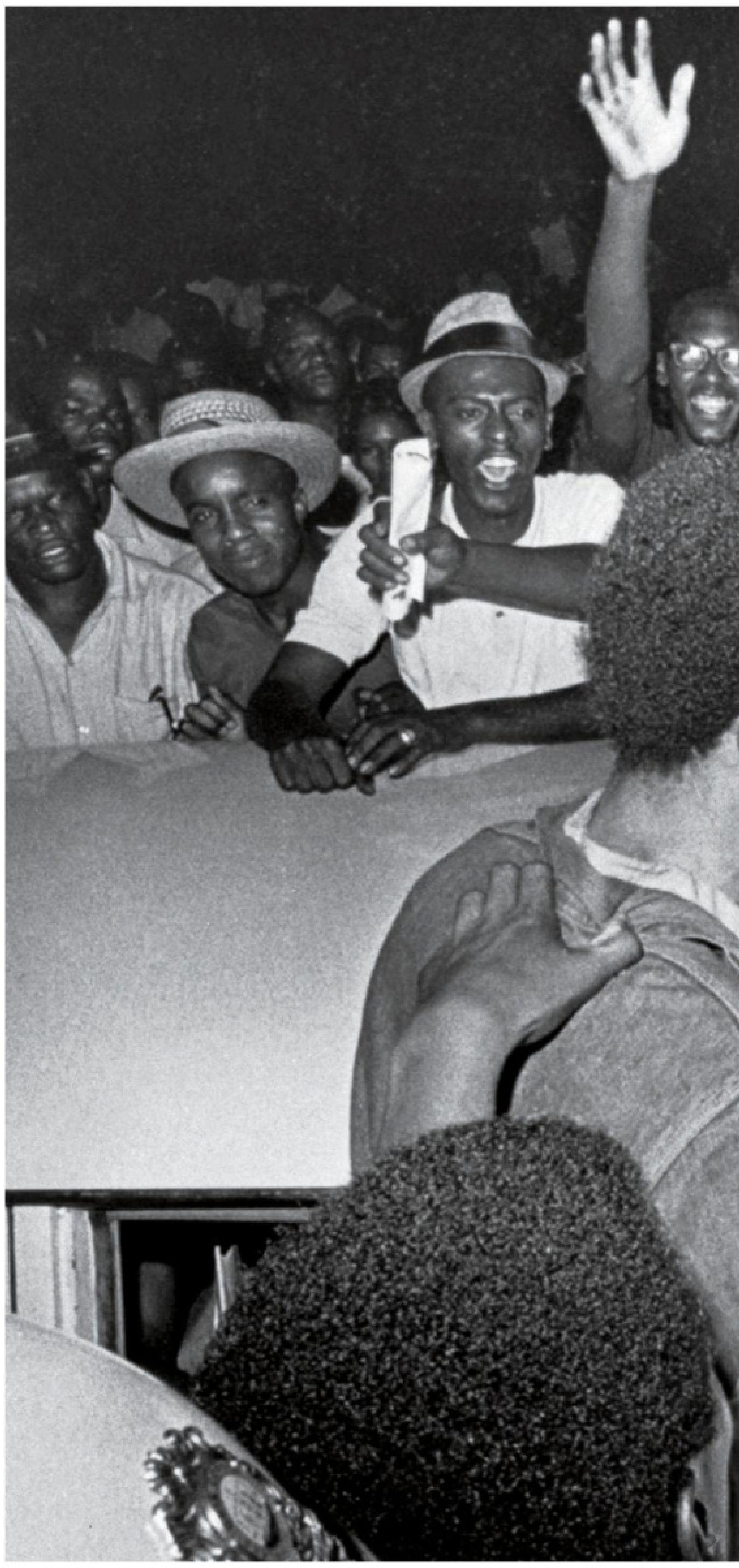
When Al-Amin was apprehended, the police saw that he had not been shot. And when they tested the trail of blood outside the grocery store in the West End, it wasn't either of the deputies'. And it wasn't Al-Amin's.

Covering the case in the Atlanta-based publication *Creative Loafing* in 2002, Mara Shalhoup wrote, "English swore that his assailant had gray eyes; Al-Amin's are clearly brown" and "the guns that were found near Al-Amin when he was captured in Alabama—guns later linked to the shooting—did not bear Al-Amin's fingerprints."

"He's this rare case where there's such compelling evidence against him," says Shalhoup, now an editor at ProPublica, citing English's statement that Al-Amin was the assailant. "And such compelling evidence to suggest he didn't do it."

Jury selection for the trial of Al-Amin was scheduled for Sept. 12, 2001. Pushed back four months by the 9/11 attacks, the trial—of a visible face of Islam, locally, nationally and internationally—began on Jan. 7, 2002. After a trial that concluded in two months, on March 9, the majority-Black jury came back with a guilty verdict, on 13 counts, including felony murder and possession of a firearm by a convicted felon. His sentence was life without parole. His first stop was the state prison in Reidsville, Ga.

When Al-Amin arrived, Muslim inmates, both in his prison and throughout the state, wanted him to lead them, to be their imam. But he experienced



frequent stints in solitary confinement, and in 2007 he was transferred to the supermax facility in Colorado, where he spent the next seven years, followed by a stint in a North Carolina prison medical facility and his current location, a federal prison in Arizona.

Throughout his incarceration, there have been appeals, protests, petitions, calls for retrial and a videotaped confession by a man currently in a Florida prison. In 2020 the U.S. Supreme Court declined to take his case. During his trial, he was under a gag order, and since he's been incarcerated, he has been extremely limited in his ability to speak to the public. His 2014 diagnosis with myeloma aided in his transfer out of the supermax, but since then the illnesses have only gotten worse. He spent two years without his sight, needing inmates to read his medical bottles, simply because the prisons wouldn't schedule him to have cataract surgery. On Aug. 18, 2021—three days

Brown is greeted by well-wishers after being released from jail in Alexandria, Va., on $10,000 bail, in 1967

GETTY IMAGES

after a protest outside of Al-Amin's prison in Arizona—he finally received his surgery, gaining his sight back.

Prisoner No. 99974-555 quietly exists, still alive, increasingly sick but refusing to die, eager to speak but largely unheard from.

I've been in touch with his wife and son for months, and they say he wants to speak. In September, the jail finally replied to my repeated requests to talk to Al-Amin for this story and told me to apply for an interview. I emailed once, twice and finally six times, but still nothing. If the goal of the system was to silence Al-Amin, it may have finally worked.

Karima says the family is still asking for release but would also be fine with a new trial. "We're in a time fight," she says. "Whether he dies or not right now has a lot to do with medical neglect. So we want to get him out. They've said he will die in prison and be forgotten. We're saying he's not going to be forgotten."

AL-AMIN, WHO TURNED 78 in October, sits in prison, serving a life sentence without the possibility of parole. Few figures in American history have simultaneously received such local, national and international praise and respect, fear and villainization. The reality is that Al-Amin hasn't been discussed on a scale that fits the magnitude of the man.

Following a year of uprisings, an attack on the Capitol, and an election cycle that further illuminated a flawed government and a divided nation, in a society that freely questions the abolishment of the police, and amid a culture war that only intensifies—the revolutionary life, words and trials of Jamil Al-Amin must be considered, in all of their discomfort. Our world is juggling a collection of breaking points, but it's not the first time we've been here. And it's helpful to hear from those who thought the most clearly, during the most tumultuous times.

And though he's absent from many history books, missing from many Black History Month programs, and the feats of his life remain largely unknown, his impact continues to be felt. In May 2020, following the killing of George Floyd by a Minneapolis police officer, St. Louis activist Mike Avery, a Black man, drove 560 miles to join the protests. Three days later, he was arrested by the FBI and charged with violating the Anti-Riot Act, a law that makes it a federal crime to cross state lines to incite a riot. The FBI cited Avery's Facebook posts as the reason for the arrest. (His lawyer said those posts were "completely mischaracterized," and the charges were dropped.)

The act is also known by another name, tacked on as a compromise in the historic 1968 Civil Rights Act: the Rap Brown Law.

It's the same law that the Chicago 7 were charged with, along with many others, following the 1968 Democratic National Convention—a story dramatized in the Academy Award–nominated 2020 film *The Trial of the Chicago 7.* And in the Academy Award–winning 2021 film *Judas and the Black Messiah,* a biographical drama about Fred Hampton and the lengths to which the FBI went to silence Black leaders who could organize, mobilize and inspire, the first person we see speaking in archival footage, within the first two minutes, about Black people, is H. Rap Brown.

"Those are not riots. Those are rebellions," we watch him say. "People are rebelling because of conditions, not because of individuals. No individual creates a rebellion. It's created out of the conditions."

For more than 50 years, a man and a system have been at odds, with neither willing to truly wave the white flag. It's a true American story, one about law and order, about the consequences of outright, unwavering dissent, and the establishment's continued need to neutralize unbought, unbossed Black thought that catches fire.

In this fight, there are no winners, and there is no justice. This is a story of how far we haven't come. —*With reporting by* NIK POPLI *and* SIMMONE SHAH

CLIMATE IS EVERYTHING

An American diplomat in Scotland

What to watch for at COP26

Raising the steaks

Hearing Africa’s voice

Banking on climate

Green energy in the outback

ILLUSTRATION BY PETER GREENWOOD FOR TIME

THE OPTIMIST'S CHALLENGE

By Justin Worland*/Naples, Italy*

JOHN KERRY CAN FEEL THE HEAT. IT'S A sunny mid-July day in Naples, Italy, and we're sitting on the roof of his hotel overlooking the Mediterranean.

As tourists on the other side of the patio snap photos of Mount Vesuvius looming in the background, Kerry is warning about the fate of human life on earth. Kerry, 77, has been on the public stage for decades as a Senator, presidential candidate and U.S. Secretary of State and, on paper, his latest role representing the U.S. as President Biden's climate envoy may look like a demotion. But Kerry rejects any question about why he's taken this role. The fate of civilization is on the line, and he will do anything he can to help. "I've fought around war and peace, and that was life and death. This is already life and death—and in growing terms," he says. "This is existential, and we need to behave like it."

'We're fighting for everything.'

Despite the stifling heat and humidity, the lobby of the Excelsior hotel several stories below is brimming with life unthinkable just a few months before. Chatter in Arabic, Dutch and Japanese can all be detected among the cadre of diplomats who have descended here for a gathering of energy and climate ministers from the world's biggest economies. It's a key meeting in the yearlong slog to COP26, the U.N. climate conference set to take place in Glasgow in November. A few miles away, in the city center, thousands of protesters are marching and chanting, insistent that official proceedings aren't moving fast enough. SYSTEM CHANGE: ANOTHER WORLD IS POSSIBLE, one sign reads.

The stakes are existential, but the debates at the Excelsior can seem pedantic; in one conference room, negotiators are tussling over the wording of how countries should submit new climate plans. On the roof, I ask Kerry about the various conflicts that some fear might scuttle the COP26 talks—the U.S. rift with China, Europe's plan to tax climate laggards and the demands from developing nations that their rich counterparts do more. Kerry takes each one in stride, responding to every question with optimism that reason will prevail. "I've always believed in diplomacy," he says. "I believe in the ability of people to sit down and try to work reasonably together." In the frenzied 24-plus hours of talks that followed, Kerry's team sought to put that mantra into action, refusing to let the two-day conference end without an agreement. The results were mixed: the U.S. helped broker a key compromise to affirm the countries' broad commitment to ambitious climate-fighting measures but could not win universal agreement on a specific commitment to phase out coal.

This year, the fate of our civilization is being determined in bland convention-center meeting spaces, slick corporate boardrooms and regal hotel ballrooms, and wherever you go, it's hard to escape Kerry's name. He comes up in conversations with the diplomats, legislators and business personalities on the inside as well as with the activists looking in. The dynamic is, in part, a testament to Kerry's role as an elder statesman who is greeted with open arms by heads of government in foreign capitals. But it's also a recognition that even after a Trump presidency that stomped on diplomacy and global norms, governments want the multilateral system to work—and for the U.S., which wrote the rules

PHOTOGRAPH BY PETER HAPAK FOR TIME

of the road in the aftermath of World War II, to do its part and remain an essential player.

On the road, Kerry has clearly boiled down the U.S. mission: his country wants to keep the world from surpassing 1.5°C of global temperature rise above preindustrial levels. Temperatures have already risen 1.1°C, and scientists say meeting that goal requires dramatic action right now. The 1.5°C marker has come to represent the point where we are likely to face the worst effects of climate change, a reality often assessed in feet of sea-level rise, days of drought and the cost of storms. But the now decades-long failure to adequately address climate change has also placed the multilateral system and the U.S.'s place in it at risk. If nations don't come together, not only do U.S. leadership and democratic governance suffer, but the resulting disorder—caused by those storms, droughts and so much more—will also force a transition to something new.

It's hard to imagine someone more fitting to defend multilateralism than Kerry, a Vietnam veteran turned antiwar activist and son of a diplomat who has served at the highest levels of the U.S. government for decades. Kerry speaks carefully, not wanting to overstep his climate mandate, but understands the stakes. "We're fighting for everything here," he says. "It's not just the climate—it's fighting for a reasonable response by governance, for a reasonable relationship with our fellow citizens, or noncitizens, a reasonable relationship with people in the world."

Over the past eight months, TIME has followed Kerry on that mission—first via telephone calls and virtual events and then, as vaccination became widespread and travel returned, in person on both sides of the Atlantic. Kerry makes a robust case for the constructive role he, his government and, indeed, good diplomacy have played in the lead-up to this year's climate conference. But to measure Kerry's success by the list of deals and announcements he brings to COP26 would be premature. The real test will come in the weeks and months to come—not just for Kerry but for the world.

ON THE LATE-NIGHT TRAIN from Geneva to Milan in late September, long after it has mostly cleared out, Kerry is taking a break from his briefing book and following each station stop intently, reflecting on the Alpine geography and noting with excitement when we cross the border into Italy. He offers me candy from his favorite and oft-visited chocolate shop in Geneva.

Kerry is an internationalist when many leaders are looking inward. He knows where to stop for chocolate in foreign cities, yes, but he also has a vision of solving problems through diplomacy and dealmaking. The son of a foreign service officer, he grew up on both sides of the Atlantic at a time when the U.S. was working to rebuild Europe, attending boarding school in Switzerland before returning to the U.S. for high school. "I grew up very used to other cultures, other countries, other points of view," he tells me. "I didn't view things exclusively through an American lens."

From the beginning of his political career, Kerry found himself drawn to both environmental issues and foreign affairs—something he attributes to his transatlantic upbringing and a mother he says was devoted to green issues. And throughout his career, he has tried to prioritize climate change even as it remained on the broader political back burner. In 1992, he traveled to the Rio Earth Summit, the first U.N. climate meeting, to advocate for global climate solutions. (He had his first significant conversation with his wife Teresa Heinz Kerry on the sidelines of the meeting, where she was impressed by his singing in her native Portuguese.) In the Senate, he worked publicly to build a bipartisan coalition to pass climate

THE CLIMATE PLEDGE
CLIMATE WEEK NYC
CLIMATE GROUP

THE WHITE HOUSE
WASHINGTON

From left: Kerry, with French President Emmanuel Macron; speaking at the Earthshot Prize award ceremony; with Amazon founder Jeff Bezos; addressing the White House press corps

FROM LEFT: MICHEL EULER—AFP/GETTY IMAGES; YUI MOK—REUTERS; GETTY IMAGES (2)

legislation that would have capped U.S. emissions while working behind the scenes on efforts to educate his colleagues on the urgency of climate science. "He came at this with a lot of personal determination," says Sheldon Whitehouse, a Democratic Senator from Rhode Island.

Kerry took over as Secretary of State in 2013, at the beginning of President Obama's second term. His tenure is perhaps best remembered for his role brokering the ill-fated Iran nuclear nonproliferation deal, but Kerry also takes particular pride in his work to center climate diplomacy in the U.S. foreign policy apparatus. Immediately upon taking office, Kerry began traveling the world, putting the issue on the agenda of heads of government rather than just environment ministers. Inside the department, he pushed every diplomat to have basic fluency on the issue and incorporated it into talking points for meetings large and small. "He basically said that every diplomat at the State Department was going to be a climate negotiator, on one level or another," says Jon Finer, Kerry's chief of staff at the time who now serves as the Deputy National Security Adviser.

All this helped lay the groundwork for the talks that would eventually yield the Paris Agreement, which sets up a framework for countries to reduce their emissions. Although the French hosts shepherded the deal into existence, the structure and details of the agreement were designed to meet the exigencies of U.S. politics. Kerry remained on the ground for most of the two-week conference, engaging directly in negotiations most Cabinet officials would leave to underlings. A wide range of officials ultimately deserve some credit for shaping the Paris deal, which was the result of intense negotiations between nearly 200 nations, but Kerry played a central role steering the talks and bringing the world to an agreement.

Kerry took his current job during some of the darkest hours of the ongoing pandemic and immediately faced a tough deadline. He spent three years rallying the world for the Paris talks; this time around he had only nine months before COP26. Kerry quickly adopted the conference organizers' aim of creating a pathway to keep temperature rise to 1.5°C as his own. Scientists estimate that to have a good chance of meeting the 1.5°C goal, global emissions would need to be sliced in half by 2030, but a February report from the U.N. climate-change body found that the combined climate commitment from countries would barely slow emissions in the next decade. Almost immediately, Kerry turned his diplomatic focus to G-20 countries—which account for more than 80% of global GDP and emit 75% of global greenhouse gases. A September analysis from the World Resources Institute showed that action from this group alone could bring the world close to meeting the 1.5°C goal. "If the 20 major emitting countries [do] all that's possible, then, Glasgow will be a success," he told me in March. "If we do our jobs, all of us, hopefully, we can look at Glasgow and say this was a turning point."

China, without question, was the most important G-20 nation to pursue. The country is the world's largest emitter and second largest economy. And although China has committed to peaking and then declining its emissions by 2030, scientists say it needs to happen sooner to keep the world in line with the 1.5°C goal.

From his first months as Secretary of State under Obama, Kerry set out to build a bridge to China on climate while tensions festered on other matters, putting the issue at the center of the relationship. In 2014, in Beijing, Chinese President Xi Jinping and President Barack Obama, with Kerry by his side, announced agenda-setting plans to cut emissions, effectively inviting other countries to get on the same page. On the back of Kerry's climate diplomacy, Obama and Xi feted each other a year later at a state dinner in Washington—

perhaps the zenith of relations between the two countries in recent years. In the early days of the Biden Administration, longtime watchers of international climate politics speculated about whether Kerry would try to repeat that effort. Kerry told me that from the outset he knew that wouldn't be possible—the Trump presidency had spoiled the well, and, while less vociferous, Biden hasn't sought to placate China. "It's a very, very different time now," Kerry says. "It's a very different set of political circumstances."

Instead, he sought a subtler form of rapprochement, traveling to China in April, becoming the first senior U.S. official to visit since the start of the pandemic. His message, he says, was to create a lane for climate collaboration amid the iciness. The reception was a sharp contrast from the jubilant atmosphere at the state dinner six years earlier. The two parties released a joint statement, agreeing to cooperate but not much more. Then in September, after making the 7,000-mile trip to Tianjin, Kerry encountered even more tense feelings. Despite the long journey, China's Foreign Minister Wang Yi only met with him virtually, and said that climate collaboration could not be an "oasis" away from the other rifts in the relationship. "If the oasis is surrounded by desert, sooner or later the oasis will also become desert," he said.

Nonetheless, Kerry remains optimistic. He has met with his counterpart, Xie Zhenhua, more than two dozen times and insists that China "remains essential" to the U.S. strategy. But his approach has necessarily been to give the country space. "They will not get pushed," he says. "If you publicly are trying to hash this out, it's going to work against you."

Other countries have been more open to entreaties. In April, Kerry traveled to South Korea and made the case for ending international coal financing abroad; a few days later, at a U.S.-hosted climate summit, the South Korean government announced it would do just that. Japan followed a few weeks later. In September, Kerry sent a delegation to South Africa to work with allies to put together a financial package to wean the country off of coal. And Kerry's joint initiative with the E.U. to push other nations to cut emissions from methane, a potent greenhouse gas, has drawn commitments from at least two dozen countries.

Kerry's job centers on engaging other countries, but he says that the immense role the private sector plays in global affairs makes corporate leaders an essential target. The private sector, he says, has the power to make or break the efforts of diplomats. "There's no way to get this done unless the private sector buys in 100%," he says.

So, when Kerry isn't meeting with his official counterparts, he's often working the room with CEOs and other executives, pushing them to join business coalitions and highlighting the companies that are making progress. In New York, in late September, Kerry took the stage at the Concordia Summit at the same time that world leaders were gathering a few blocks away for the U.N. General Assembly. The Concordia conference draws a mix of public officials, corporate executives and civil-society leaders, and Kerry's session featured senior executives from LinkedIn and Apple, whom he peppered with questions as he announced the Glasgow Is Our Business initiative, which is designed to show corporate support for a robust outcome at COP26. A few weeks later, in Geneva, I watched as Kerry convened a meeting of more than two dozen companies—from DHL to the Boston Consulting Group—to discuss what he named the First Movers Coalition, whose members all commit to helping bring new clean technologies to market.

"I've had several calls with him, he talked to our board … I've had some video conferences with him," says Scott Kirby, the CEO of United Airlines, a member of the coalition. "The only way to solve this is a public-private partnership where like-minded people in the public arena and the private arena find real solutions."

In his position, Kerry has traveled to more than a dozen countries and met with many more leaders from other countries and the private sector. It follows that *energy* is often the first word that comes to mind when I ask officials around the world about him. "He's a force," says Fatih Birol, the head of the International Energy Agency. That energy, combined with Kerry's long-term commitment to the effort, has translated into a slew of constructive bonds—the glue that keeps diplomacy intact. Frans Timmermans, who leads climate policy in the E.U., said they share a "strong personal relationship" after years of working together. "There's a base of trust, and that makes these complicated things easier," he says.

"There's just no substitute for the kind of deep, meaningful, decades-long relationships John brings to his role," Wendy Sherman, the U.S. Deputy Secretary of State, told TIME. "It's ultimately relationships like his that are critical to achieving diplomatic breakthroughs."

But relationships can go only so far. Kerry has also had to combat persistent questions about the U.S.'s own climate commitments. Under Trump, the U.S. had reneged on a commitment to help finance climate efforts in developing countries. And although Biden in April proposed contributing $5.7 billion annually, much of the rest of the world rejected that as insufficient. In interview after interview, Kerry made it clear that he was pushing hard for Biden to double down on his commitment. "We made a promise back in Paris," he said in July. "We have to live up to our promises." After much wrangling, Biden announced in September that the U.S. would double its commitment.

More recently, attention has focused on whether the U.S. can actually meet its own emissions targets. In April, President Biden promised to cut emissions in half by 2030 when compared with 2005 levels, but the details remain fuzzy on how he plans to achieve it. The spending packages currently on Capitol Hill would likely take the U.S. close to those targets, but they remain up in the air.

"John Kerry is doing his best, but Congress may or may not fulfill the climate commitments," says Mary Robinson, the former President of Ireland who now works on climate issues as the chair of the Elders, an NGO led by prominent former officials. Whatever happens in Congress, Kerry is confronting a challenging reality. For three decades, U.S. engagement with international climate efforts has seesawed with each new Administration. No matter how much cachet Kerry has on the global stage, the world is unsure how much it can trust the U.S. and whether the system it helped establish is actually working. “Entirely outside of the substance of climate, Glasgow is a test case for whether American leadership is still a force to be reckoned with,” says Whitehouse, the Senator from Rhode Island. “If we can’t be a part of the solution now, and climate gets really out of hand, everybody in the world is going to look at what happened in the U.S.—and it’s not a good story.”

WE ARRIVE IN MILAN at nearly 11 at night. With one exception, Kerry and three of his advisers are the only people left in the sleepy train car. Kerry reaches for his old-school Orvis suitcase, worse for the wear after many of these trips, and lugs it through the grand train station to a waiting car. For the past few days, Milan has played host to a youth climate summit, bringing together young people from around the world to come up with their own demands about how to address climate change and then present them to ministers and senior government officials.

The next morning, Kerry joins his counterparts on the stage of the primary convention hall, surrounded by hundreds of youth climate activists seated in a semicircle surrounding the stage. Despite the gesture of open communication made by the international climate negotiators, an undercurrent of anger and dissatisfaction is palpable. Earlier that morning, youth protesters had interrupted Italian Prime Minister Mario Draghi and police had escorted them out outside. During the conference, a crowd of protesters chanted outside while others spray-painted graffiti on the convention hall. A few days prior, Greta Thunberg had summed up the sentiment from the same stage, calling climate action leading up to the talks a bunch of “blah blah blah”—empty rhetoric while the world burns.

Facing the youth, Kerry didn’t turn defensive. If anything, he seemed to join in. With no notes and no teleprompter, for seven minutes he described the climate battle as “a fight for our lives,” condemned the “BS” of laggards and called out the “powerful interests that want to continue business as usual.” He said that developed countries are failing to help their poorer counterparts in financing the transition. He invoked the Holocaust to remind people that the world once said, “Never again,” and yet we are already we are letting millions die from air pollution, extreme heat and other climate-change-related tragedies. “This is an existential battle,” he says. “And for some people in the world it already is absolutely existential: they’re losing their lives.”

The next day, I asked Kerry whether he sees himself in the youth activists. After all, before he held any elected office, Kerry was a combat veteran turned antiwar activist who took to the streets to protest Vietnam. “I don’t feel separated from them at all,” he says. “I feel like the same person I was in terms of my activism, frustration, motivation. I would probably be sitting there now if I was 18 years old. I sort of feel like I’m playing the same role here. I’m pushing, trying to lay out what I believe is the basic truth about climate.”

If the stakes are existential for the planet, so too are the stakes for U.S. leadership on it and the entire multilateral system that organizes relations between countries and people. On multiple occasions, Kerry brings this up to me without my prompting. “This is what we built after World War II, a community of nations engaged with each other,” he told me in Naples. “And we’ve done lots to try to live up to that ... We’ve pushed frontiers of solving problems. And here’s the biggest problem of all, and we have not pushed the frontier sufficiently at all.”

It’s hard to know exactly what comes next if the multilateral system doesn’t come together at this moment. The world has had a little taste of how climate change will hit us, and it will only get worse; rampant climate migration and increasingly deadly crises don’t bode well for international collaboration. In conversation, Kerry acknowledges that the President has asked him to look at the possibilities of a penalizing high-carbon imports, a turn from carrot-based multilateral engagement to a stick-based approach. But still he keeps vague any speculation about what failure would mean. “If we get into not acting,” he says, climate change is “going to eclipse a lot of these other” issues.

‘This is existential, and we need to behave like it.’

Kerry is known for his optimism. People often portray him as the hard-charging diplomat, determined to get the deal and certain in his ability to deliver. That personality trait is evident watching him in action and in conversation. But it’s just as clear, when listening to him grapple with the science, that he doesn’t see another option. “I think you have to be an optimist to continue the fight,’’ says David McKean, who served as Kerry’s chief of staff in the Senate and later in a senior role in the State Department under Kerry. “So, I think he’s an optimist, but first and foremost, I think he’s realist.”

When I leave the conference center in Milan, where I had just wrapped up what I knew would be my last conversation with Kerry for this story, I take a walk in the nearby park—a pristinely landscaped public space that abuts a shiny shopping center. Workers are scrubbing the graffiti in big red letters that adorn the space, but most of it remains legible. CLIMATE EXTINCTION, one says. CRIME SCENE, says another. In the center of a wide open space, on the wall of a little cement structure, COP26 BLA BLA BLA is graffitied, impossible to miss.

Kerry has two weeks to show that talk still matters.
—*With reporting by* LESLIE DICKSTEIN ☐

THE COP26 AGENDA

COP26, shorthand for the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change, is in many ways as wonky as it sounds. For two weeks in early November, negotiators from nearly 200 countries will gather in Glasgow to debate the granular details of how best to put the world on a path to tackle climate change, hashing out everything from carbon markets to transparency mechanisms.

Alok Sharma, the official charged with leading this year's U.N. climate-change conference, knows how inaccessible this can all sound. He describes himself as a "normal person" in the climate space rather than a longtime "eco warrior." But in nearly two years of planning for this summit, Sharma says he has come to understand the urgency of the crisis firsthand, visiting frontline communities hit by hurricanes, flooding and drought. "It's really quite emotional," he says.

The overarching goal is to limit global temperature rise to 1.5°C above preindustrial levels—or at least do enough at this meeting for such a goal to stay within reach. That's the threshold at which scientists say the world is likely to experience a range of catastrophic impacts and irreversible tipping points that would transform the climate, and life on earth, as we know it. To put the world on the path needed to avoid such disaster, Sharma and his team have broken down the goals of COP26 into a handful of digestible objectives, from advancing climate finance to slashing coal and growing the deployment of renewable energy. "This is going to be a decisive decade," he says. "We need to get this right."
—*Justin Worland*

1. Restore and protect the ecosystems that make human life possible

ELISA LONCON ANTILEO

Alongside our thirst for fossil fuels, humans' destruction of nature has triggered the climate and ecological crises that now threaten our life on this planet. A major goal for delegates at COP26 is to improve humans' relationship with nature: to restore forests and wetlands to absorb more carbon; slow the loss of animal and insect species that are vital to our food systems; and protect the rivers and springs we rely on for water.

Elisa Loncon Antileo is leading an attempt to rebalance that relationship and transform humanity's approach to the natural world in her country of Chile. In July, she was elected president of the 155-seat constitutional convention that the South American nation launched to rewrite its dictatorship-era constitution. The process began after 2019 protests against the country's market-focused economic model, which critics say drives both inequality and an unsustainable exploitation of natural resources.

Loncon, a language and literature professor from Santiago, is part of Chile's Mapuche community and occupies one of 17 convention seats reserved for Indigenous people, and one of her priorities is to bring Indigenous thinking on the environment to the constitution. "There's a development model that's based on seeing nature as a resource for humans—especially men—to exploit and dominate," she says. "But Indigenous people have always

Chile is rewriting its constitution, and Loncon wants the new document to reflect Indigenous thinking on how to coexist with the natural world

had the philosophy that humans are interdependent with nature and must conserve nature as a mother."

Perhaps the most urgent environmental question for Chile's constitution is about who gets access to water resources. The country has suffered a punishing decade-long drought, and the privatization of water rights since the 1980s, under the current constitution, has allowed businesses to alter the course of river basins and pump water out of the land for mining projects, leaving large regions dry.

Loncon grew up in a community of subsistence farmers in the province of Araucanía and recalls cultivating the land and going to get native fruits—such as dark purple maqui berries and small banana-like *chupones*—from a nearby mountain. Now, thanks to the diversion of water to industrial eucalyptus and pine farms, she says it's much harder to find those fruits, or to live that kind of life. And as climate change continues to exacerbate dry seasons, it's only bound to get worse.

Loncon says the world can learn from the inclusion of Indigenous voices in Chile's constitutional project as it accelerates efforts to deal with climate change. "We're pushing the rights of Mother Earth into the conversation. From my point of view, it's an opportunity for Chile and the world in general to adopt values from Indigenous thinking." —*Ciara Nugent*

2. Ensure a rapid and equitable transition away from coal

CHIBEZE EZEKIEL

Coal is one of the dirtiest energy sources in use, and coal plants still generate 38% of the world's electricity. One strategy is to stop them from getting built in the first place, and Ghanaian activist Chibeze Ezekiel has had some success there. In 2013, he'd just returned from a climate conference in Istanbul when he learned Ghana's government had started discussing a proposal to build a large coal power plant, the country's first.

His organization, 350 Ghana Reducing Our Carbon, began visiting the communities where the proposed plant would be built, educating villagers about the potential effects on local rivers, air quality and groundwater supply, and the consequences for their health. They also told locals about the declining costs of renewable energy. "We were not just saying no to coal; we were offering an alternative," Ezekiel says.

By the time the government pitched the proposal to the local community in 2015, they were prepared to challenge official assertions. Ezekiel calls it his "submarine approach." "We came out of nowhere to bombard them from all angles—social media, press conferences, community forums." And it worked. On Oct. 10, 2016, Ghana's Environmental Minister announced that the coal plant would not be built. Less than a year later the nation's President said that all new power projects would use renewable energy only. Ezekiel is especially proud of that. "If we had allowed a coal plant to be established in 2015, I am sure there would have been more." —*Aryn Baker*

LONCON: ELVIS GONZALEZ—EPA-EFE/SHUTTERSTOCK; CHILE: JUTTA ULMER—MAURITIUS IMAGES GMBH/ALAMY;EZEKIEL: ONESIDE PIXEL/COURTESY CHIBEZE EZEKIEL

3. Make climate solutions profitable

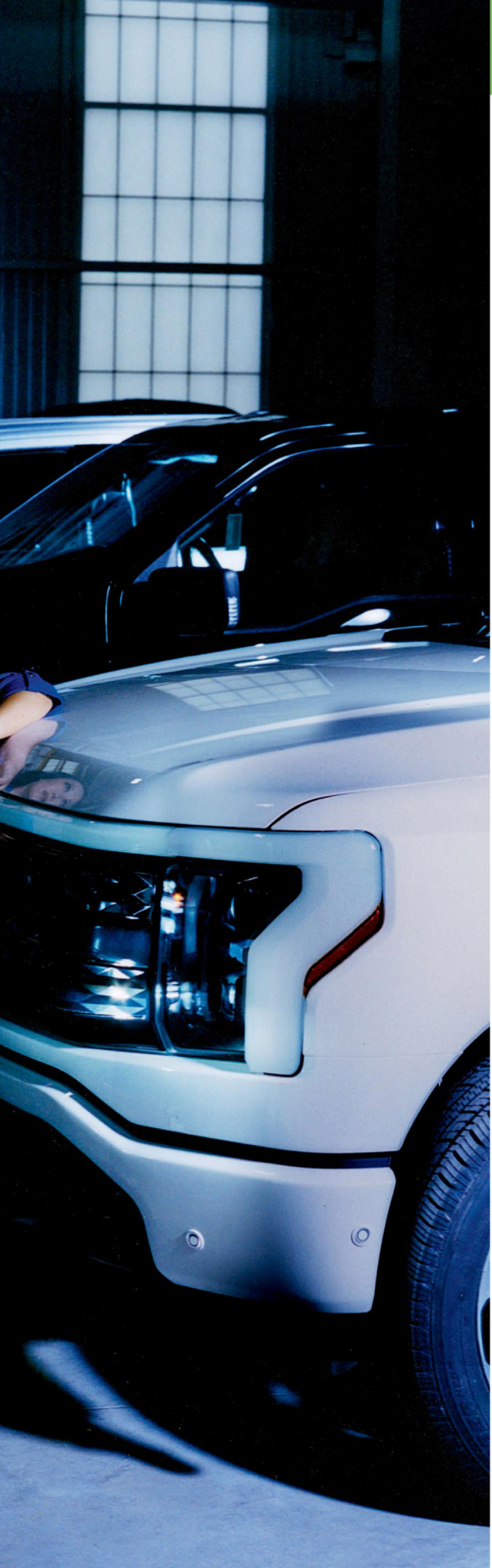
HANK PAULSON

Weaning the global economy off fossil fuels is impossible without collaboration from businesses and civil society. Leading a key effort to foster such collaboration is former U.S. Treasury Secretary Hank Paulson. In January, Paulson became executive director of TPG Rise Climate, a new climate-focused private-equity fund that has raised $5.4 billion so far to invest in clean energy, decarbonized transport, green agriculture and other climate solutions. Crucially, Paulson says, the fund aims to deliver not only emission cuts but also strong returns for investors, which include some of the world's largest multinational corporations. "It's going to take massive amounts of capital to finance the decarbonization of the global economy—much more than governments can provide," he says. That's why the fund needs to show that climate solutions can be an attractive private-equity opportunity.

As of March, around 20% of the world's 2,000 largest public companies had committed to net-zero targets. Although campaigners warn that many lack firm plans to reach those targets, business leaders' enthusiasm for climate action is "startling and positive," Paulson says. He hopes governments will use COP26 to announce measures that will encourage more action from businesses, from subsidies for technologies that cut emissions to carbon-pricing systems. "What I want to see is rich countries putting real money on the table, or taking other actions, to provide the tools for the private sector to make this transition." *—Ciara Nugent*

PAULSON: LUCY NICHOLSON—REUTERS

Zhang's Ford F-150 Lightning pickup truck has made believers out of many pickup-loving skeptics of electric vehicles in the U.S.



4. Shift the global vehicle fleet from gas-powered to electric

LINDA ZHANG

When Linda Zhang became chief engineer for Ford's F-150 Lightning three years ago, she took on what some might consider an all but impossible job. In relatively short order, she had to roll out a reasonably priced electric version of the most popular vehicle in the U.S., while skirting the sensibilities of F-150 loyalists whose ethos might be summed up in country-rap artist Breland's popular refrain: "Don't touch my truck." But Zhang, who's been an engineer at Ford for 25 years, "was actually super excited about it," she says. "The prospect of being able to really go down more technologically advanced routes and providing some shock and awe to our customers ... in a good way."

To meet its net-zero-emissions goals under the Paris Agreement, the U.S. needs to almost completely phase out gasoline-powered vehicles by 2050. U.S. electric vehicles (EVs) went from next to 0% of the new-car market in 2010 to 2% in 2020, but the switchover is not progressing nearly fast enough; the market is on pace to be only 60% electric by the target year. New federal policies could accelerate the electrification process, but carmakers will also have to convince more drivers that EVs—even trucks—are just as good as, if not better than, the gasoline vehicles they're used to. "There was a lot of skepticism around whether EV trucks can really be tough," Zhang says. For Ford's F-150 Lightning, overcoming that skepticism meant not only surpassing the gasoline variant's torque and acceleration stats, but also adding extra capabilities, like the $40,000-and-up Lightning's ability to power an owner's entire home during a power outage.

Some truck fans might have had some skepticism about Zhang herself—standing 5 ft. 3 in., the Chinese American engineer might not be the first person many pickup owners would imagine as the mastermind behind their hulking two-ton F-150 trucks. But Zhang's automotive roots go deep—her father, a Chinese immigrant who brought her to the States as a child, researched transmissions for Ford. Zhang herself has made it her business to challenge all kinds of expectations, from what will power a new generation of American vehicles to who will design them. And in breaking down one of those major preconceptions—that an electric truck would never be able to step into a niche long occupied by gas guzzlers—Zhang might have pulled off the impossible. After thousands of hours of development and testing, Ford counts U.S. President Joe Biden among those impressed by Zhang's work. "This sucker's quick," he said after a May test drive. As of October, Ford has tallied 150,000 F-150 Lightning reservations from pickup fans around the country ready to drop gasoline for good when deliveries begin in spring 2022. "Those," says Zhang, "are hearts and minds that we've been able to move, culturally, toward this EV shift."
—*Alejandro de la Garza*

PHOTOGRAPH BY JINGYU LIN FOR TIME

5. Finalize the Paris rule book to guarantee the integrity of carbon trading

ANDREA MEZA

Countries have long agreed that emissions could be cut faster by allowing carbon trading—where one nation or business pays for projects that reduce emissions in another country, and then counts those reductions in their own targets. These carbon markets would funnel funds to the projects that cut emissions most efficiently—potentially reducing costs of meeting targets by up to 79%. But without strong rules, two countries might count the same emission cuts twice, or a business might be paid for doing things it would have done anyway.

Andrea Meza, Costa Rica's Minister of the Environment and Energy, is on a mission to deliver a robust carbon-trading system. As well as overseeing Costa Rica's world-leading decarbonization strategy, she is leading a coalition of 36 countries demanding high standards for carbon offsets under Article 6 of the Paris Agreement—which remains the only part of the deal not yet finalized.

Activists say the risk that countries will use carbon markets to cheat the system is so great that no carbon trading should be allowed at all. Brazil and Saudi Arabia have been accused of trying to push through weak rules to make it easier for them to meet their emissions targets, while politicians in Australia oppose any rules that disallow credits generated under previous international carbon-trading schemes that haven't been sold yet.

Negotiators need to make sure that "carbon markets really work as a means to [limiting temperature rise] and are not seen as an objective in themselves," Meza told TIME during a pre-COP media briefing. That means making sure the projects funded by offsets are transparently accounted for and ambitious—not just relatively cheap tree-planting programs that governments would do anyway, but the more expensive investments in decarbonizing industries. "We really need to guarantee for all the vulnerable countries that these projects are really transformational."
—Ciara Nugent

6. Persuade the world to invest in renewable energy

FATIH BIROL

As the head of the International Energy Agency, Fatih Birol oversees research on trends that define energy markets. When Birol speaks, energy companies and policymakers around the world listen, informing decisions that determine how humans power homes, factories and cars.

This year, Birol turned the world upside down when he declared the dawn of a new world economy powered by clean energy after a century of an economy built around oil. First, in May a report from the agency said that there is no longer any need to invest in new fossil-fuel supply infrastructure; then, in October, the agency called for a tripling of global investment in clean energy and related technologies—some $4 trillion annually by 2030. "A new global energy economy is emerging," Birol says. "Clean-energy technologies are slowly but surely going to replace the existing energy industry."

For anyone following the details of climate policy, Birol has been a significant presence in the conversation in recent years. He has been a headliner at major gatherings, and his analysis has been widely considered authoritative. And for a long time, activists have criticized Birol and the IEA for not doing enough.

But in 2021 those complaints have all but disappeared as Birol has become one of the most persuasive speakers on the need to rapidly grow clean energy. His case for renewables is manifold. The cost of clean energy has fallen, making it cheaper than fossil fuels in many places around the globe. Deploying clean energy can also grow the economy, creating a market worth more than $1 trillion by midcentury while providing power to developing countries in the Global South.

And perhaps most important, investment in renewables will simultaneously keep global temperatures from rising to unsustainable levels.

The IEA has also laid out specific clean-energy milestones; by 2050, 90% of electricity should come from renewable-energy sources.

Still, Birol knows his analysis can go only so far, and he hopes governments take COP26 as an opportunity to embed his recommendations into policy. A successful COP would send a signal to investors that clean energy is here to stay and that continued investment in fossil fuels is risky, he says—and governments can play a pivotal role in spreading the word. "We need to find different ways of supporting the right choices," Birol says. *—Justin Worland*

MEZA: COURTESY THE MINISTRY OF ENVIRONMENT AND ENERGY OF COSTA RICA; BIROL: SIMON DAWSON—BLOOMBERG/GETTY IMAGES

Already, monsoon season in Dhaka can see up to 10 in. of rain a day; with climate change, it's bound to get worse

7. Help vulnerable cities become more resilient

RAFIQ AZAM

Dhaka, the capital of Bangladesh, is almost entirely surrounded by the waters of the Ganges River delta. Highly vulnerable to rising sea levels, Dhaka also faces threats from above: monsoon rains regularly overwhelm drainage systems and flood streets. Paradoxically, Dhaka also lacks clean water; as the population of 24 million sucks wells dry, seawater rushes in to take its place.

Most urban planners would despair at the prospect of making Dhaka climate-resilient. Not Rafiq Azam, a Bangladeshi architect who leads a team redesigning the historic southern half of the city to adapt to a warmer, wetter future. "If the challenge becomes a problem, it's misery," says Azam. "But if you think of a challenge as an opportunity for innovation, it turns into a celebration." Azam began by revitalizing the city's neglected urban parks, turning them into small green oases that double as water-catchment areas: deep trenches below collect and store rainwater runoff from the parks, which is then filtered and pumped to a community tap as drinking water. The existing drainage ditches take undrinkable runoff from city streets, reducing flooding. So far his team has transformed 31 community parks and playgrounds. "Rain is no longer a pain in these areas," he says. "It's reason for celebration."

Storm surges threaten low-lying cities globally; if Dhaka's experience is a cautionary tale of the challenges of climate change, its solutions could be equally applied elsewhere. —*Aryn Baker*

8. Urge the developed world to share the burden

MIA MOTTLEY

In the battle to slow down climate change, countries like Barbados are on the "front line," says Prime Minister Mia Mottley. The island is threatened by rising sea levels and extreme weather events like hurricanes that are increasing in intensity and frequency.

But adapting to the impacts of climate change, to build defenses and repair the damage from hurricanes, will cost money that Barbados, with a national debt ratio of 144% of GDP, does not have. Mottley has made tackling the country's debt a priority, and she negotiated a debt restructuring for Barbados shortly after taking office in 2018 that included "natural-disaster clauses" to allow a break in interest repayments in the aftermath of extreme weather events. But the combined impact of those disasters and the COVID-19 pandemic has taken a heavy toll on the island, whose economy shrank by over 17% in 2020. "You are effectively talking about the potential loss of a decade," Mottley says.

Emerging countries like Barbados need financial assistance to adapt to and mitigate against climate change. Developed nations pledged 12 years ago to put $100 billion a year toward helping them do it by 2020, but that target has not been met, and Mottley will be among those at COP26 arguing that it is no longer sufficient. It's not just a question of countries sharing responsibilities, she says, but of ensuring their very existence. "This issue is about life and death for us. It is an issue about the stability of a nation." —*Jennifer Duggan*

DHAKA: SUMIT AHMED—EYEPIX GROUP/BARCROFT MEDIA/GETTY IMAGES; COURTESY RAFIQ AZAM; MOTTLEY: RICHARD DREW—AP

THE COW THAT MIGHT FEED THE PLANET

By Aryn Baker*/Maastricht, Netherlands*

THE COWS IN FARMER JOHN'S PASTURE lead an idyllic life. They roam through tree-shaded meadows, tearing up mouthfuls of clover while nursing their calves in tranquility. Tawny brown, compact and muscular, they are Limousins, a breed known for the quality of its meat and much sought-after by the high-end restaurants and butchers in the nearby food mecca of Maastricht, in the southernmost province of the Netherlands. In a year or two, meat from these dozen cows could end up on the plates of Maastricht's better-known restaurants, but the cows themselves are not headed for the slaughterhouse. Instead, every few months, a veterinarian equipped with little more than a topical anesthetic and a scalpel will remove a peppercorn-size sample of muscle from their flanks, stitch up the tiny incision and send the cows back to their pasture.

The biopsies, meanwhile, will be dropped off at a lab in a nondescript warehouse in Maastricht's industrial quarter, five miles away, where, when I visit in July, cellular biologist Johanna Melke is already working on samples sent in a few days prior. She swirls a flask full of a clear liquid flecked with white filaments—stem cells isolated from the biopsy and fed on a nutrient-dense growth medium. In a few days, the filaments will thicken into tubes that look something like short strands of spaghetti. "This is fat," says Melke proudly. "Fat is really important. Without fat, meat doesn't taste as good."

On the opposite side of the building, other scientists are replicating the process with muscle cells. Like the fat filaments, the lean muscle cells will be transferred to large bioreactors—temperature- and pressure-controlled steel vessels—where, bathed in a nutrient broth optimized for cell multiplication, they will continue to grow. Once they finish the proliferation stage, the fat and the muscle tissue will be sieved out of their separate vats and reunited into a product resembling ground hamburger meat, with the exact same genetic code as the cows in Farmer John's pasture. (The farmer has asked to go by his first name only, in order to protect his cows, and his farm, from too much media attention.)

Limousin cows in Farmer John's pasture. Mosa Meat will cultivate their cells in a lab to grow into hamburger that is genetically identical, no slaughter required

That final product, identical to the ground beef you are used to buying in the grocery store in every way but for the fact that it was grown in a reactor instead of coming from a butchered cow, is the result of years of research, and could help solve one of the biggest conundrums of our era: how to feed a growing global population without increasing the greenhouse-gas emissions that are heating our planet past the point of sustainability. "What we do to cows, it's terrible," says Melke, shaking her head. "What cows do to the planet when we farm them for meat? It's even worse. But people want to eat meat. This is how we solve the problem."

When it comes to the importance of fat in the final product, Melke admits to a slight bias. She is a senior scientist on the Fat Team, a small group of specialists within the larger scientific ecosystem of Mosa Meat, the Maastricht-based startup whose founders introduced the first hamburger grown from stem cells to the world eight years ago. That burger cost $330,000 to produce, and now Melke's Fat Team is working with the Muscle Team, the (stem cell) Isolation Team and the Scale Team, among others, to bring what they call cell-cultivated meat to market at an affordable price.

They are not the only ones. More than 70 other startups around the world are courting investors in a race to deliver lab-grown versions of beef, chicken, pork, duck, tuna, foie gras, shrimp, kangaroo and even mouse (for cat treats) to market. Competition is fierce, and few

PHOTOGRAPHS BY RICARDO CASES FOR TIME

Mosa Meat has recruited a global team of lab technicians and biologists to develop, build and run its scaled-up operations. From left: Rui Hueber, Laura Jackisch and Josias Tenkamdjo Mouafo

companies have allowed journalists in for fear of risks to intellectual property. Mosa Meat granted TIME exclusive access to its labs and scientists so the process can be better understood by the general public.

Livestock raised for food directly contributes 5.8% of the world's annual greenhouse-gas emissions, and up to 14.5% if feed production, processing and transportation are included, according to the U.N. Food and Agriculture Organization. Industrial animal agriculture, particularly for beef, drives deforestation, and cows emit methane during digestion and nitrous oxide with their manure, greenhouse gases 25 and 298 times more potent than carbon dioxide, respectively, over a 100-year period.

In 2019, the U.N.'s International Panel on Climate Change issued a special report calling for a reduction in global meat consumption. The report found that reducing the use of fossil fuels alone would not be enough to keep planetary temperature averages from going beyond 1.5°C above preindustrial levels, at which point the floods, droughts and forest fires we are already starting to see will negatively impact agriculture, reducing arable land while driving up costs. Yet global demand for meat is set to nearly double by 2050, according to the World Resources Institute (WRI), as growing economies in developing nations usher the poor into the meat-eating middle class.

Growing meat in a bioreactor may seem like an expensive overcorrection when just reducing beef intake in high-consuming nations by 1.5 hamburgers per week, per person, could achieve significant climate gains, according to the WRI. But denying pleasure, even in the pursuit of a global good, is rarely an effective way to drive change. Earlier this year the U.N. published the largest ever opinion poll on climate change, canvassing 1.2 million residents of 50 countries. Nearly two-thirds of the respondents view the issue as a "global emergency." Nonetheless, few favored plant-based diets as a solution. "For 50 years, climate activists, global health experts and animal-welfare groups have been begging people to eat less meat, but per capita consumption is higher than ever," says Bruce Friedrich, head of the Good Food Institute, a nonprofit organization promoting meat alternatives. The reason? It tastes too good, he says. "Our bodies are programmed to crave the dense calories. Unfortunately, current production methods are devastating for our climate and biodiversity, so it's a steep price we're paying for these cravings." The best solution, says Friedrich, is meat alternatives that cost the same or less, and taste the same or better. Melke and her fellow scientists at Mosa say they are getting very close.

According to Mark Post, the Dutch scientist who midwifed the first lab-grown hamburger into existence, and who co-founded Mosa Meat in 2015, one half-gram biopsy of cow muscle could in theory create up to 4.4 billion lb. of beef—more than what Mexico consumes in a year. For the moment, however, Mosa Meat is aiming for 15,000 lb., or 80,000 hamburgers, per biopsy. Even by those modest metrics, Farmer John's little herd could supply about 10% of the Netherlands' annual beef consumption. Eventually, says Post, we would need only some 30,000 to 40,000 cows worldwide, instead of the 300 million we slaughter every year, without the environmental and moral consequences of large-scale intensive cattle farming. "I admire vegetarians and vegans who are disciplined enough to take action on their principles," says Post. "But I can't give up meat, and most

people are like me. So I wanted to make the choice for those people easier, to be able to keep on eating meat without all the negative externalities.”

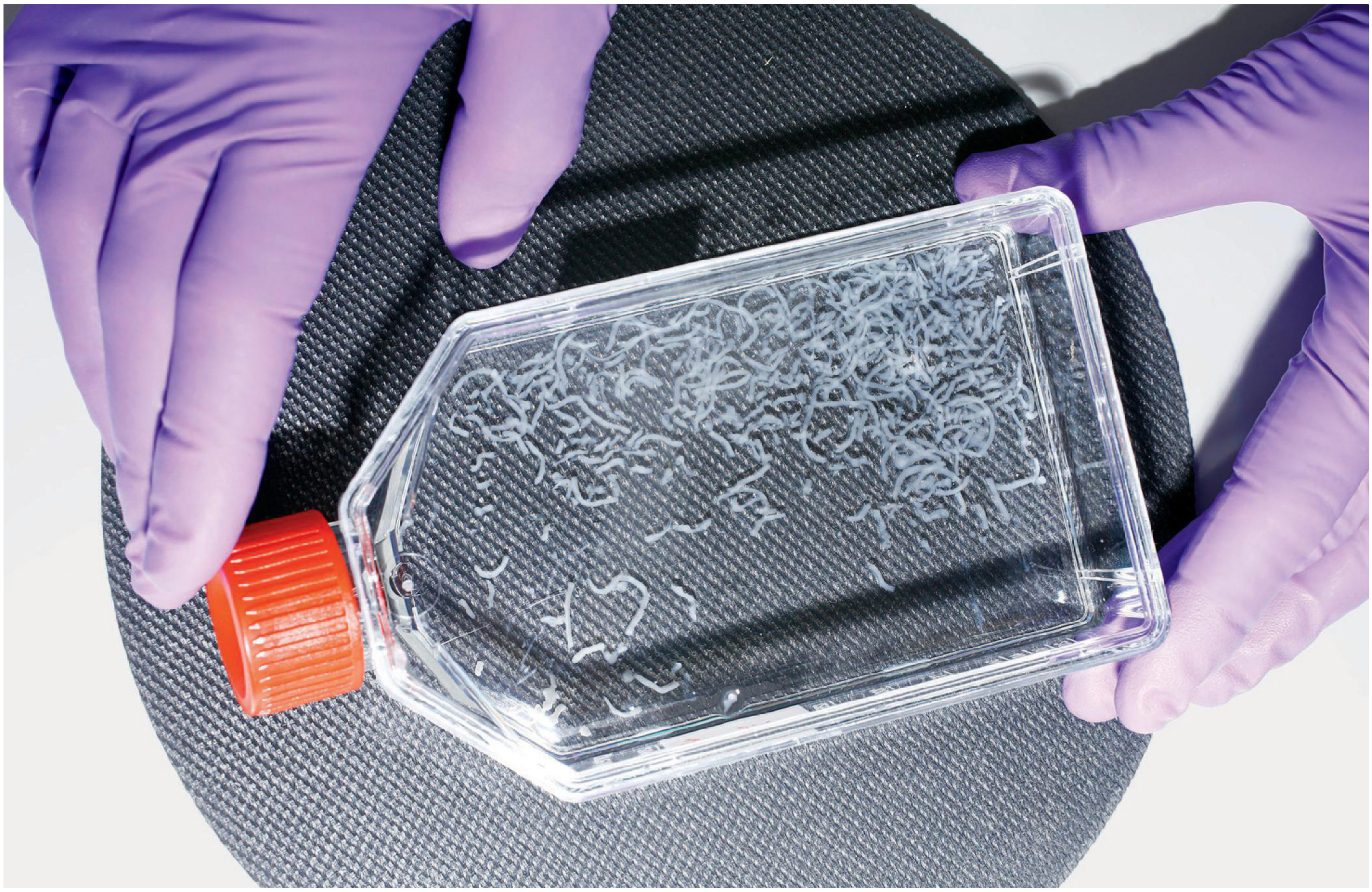
Even as it sets out to change everything about meat production, cellular agriculture, as the nascent industry is called, will in theory change nothing about meat consumption. This presents a tantalizing opportunity for investors, who have thrown nearly $1 billion at cultivated-meat companies over the past six years. Participating in the high-profile stampede to invest in the industry: Bill Gates, Richard Branson, Warren Buffett and Leonardo DiCaprio. Plant-based burger companies such as Impossible and Beyond already paved the way by proving that the market wants meat alternatives. Cellular agriculture promises to up that game, providing the exact same experience as meat, not a pea-protein facsimile.

While private investment has been vital for getting the industry off the ground, it is not enough given the immense benefits that the technology could provide the world were it developed at large scale, says Friedrich of the Good Food Institute. Cultivated-meat production could have as much impact on the climate crisis as solar power and wind energy, he argues. “Just like renewable energy and electric vehicles have been successful because of government policies, we need the same government support for cultivated meat.”

A half-gram of cow muscle could create 4.4 billion lb. of beef—more than Mexico’s yearly consumption

In the meantime, regulatory approval helps. In December 2020, GOOD Meat, the cultivated-meat division of California-based food-technology company Eat Just Inc., was granted regulatory approval to sell its chicken product to the public in Singapore, a global first. Later that month, a tasting restaurant for cell-based chicken produced by Israeli startup SuperMeat opened in Israel. Cultivated meat could be a $25 billion global industry by 2030, accounting for as much as 0.5% of the global meat supply, according to a new report from consulting firm McKinsey & Co. But to get there, many technological, economic and social hurdles must be tackled before cultivated cutlets fully replace their predecessors on supermarket shelves.

WHEN AUSTRIAN FOOD-TRENDS analyst Hanni Rützler appeared onstage to taste Mark Post’s burger at its public debut in London, on Aug. 5, 2013, her biggest fear was that it might taste so bad she would spit it out on the live video broadcast. But once the burger started sizzling in the pan and the familiar scent of browning meat hit her nose, she relaxed. “It was closer to the original than I even expected,” she says. At the tasting, she pronounced it “close to meat, but not that juicy.” That was to be expected, says Mosa co-founder, COO and food technologist Peter Verstrate—the burger was 100% lean meat. And without fat, burgers don’t work. In fact, without fat, he says, you’d be hard-pressed to tell the difference between a piece of beef and a cut of lamb. Fat isn’t necessarily harder to create than muscle. It’s just that as with protein cells, getting the process right is time-consuming, and Verstrate and Post prioritized protein. The technology itself is relatively straightforward and has been used for years in the pharmaceutical industry to manufacture insulin from



Once stem cells are isolated from the biopsy and fed a nutrient-dense growth medium, they thicken into filaments of fat. Once mature, they can be blended with cultivated muscle cells to create a product similar to ground beef

pig pancreases: identify and isolate the stem cells—the chameleon-like building blocks of animal biology—prod them to create the desired tissue, and then encourage them to proliferate by feeding them a cell-culture medium made up of amino acids, sugars, salts, lipids and growth factors. Scientists have been trying for years to use the same process to grow artificial organs, arteries and blood vessels, with mixed results.

Post, a vascular cardiologist, used to be one of those scientists. He jokes that stem-cell meat, unlike organs, doesn't have to function. On the other hand, it has to be produced in massive amounts at a reasonable cost, and pharmaceutical companies have spent decades and billions of dollars attempting—and largely failing—to scale up stem-cell production to a fraction of what it would take to make cultivated meat affordable. If cellular-agriculture companies succeed where so many others have failed, it could unlock a completely new way of feeding human beings, as radical a transformation as the shift from hunting to domesticating animals was thousands of years ago. Despite investor enthusiasm, that's still a big *if;* Eat Just, the company closest to market, is producing only a couple hundred pounds of cultivated chicken a year.

Many of the scientists at Mosa reflexively attribute sentience to the cells they are working with, discussing their likes and dislikes as they would those of a family pet. Fat tissue can handle temperature swings and rough handling; muscle is more sensitive and needs exercise. "It's like producing cows on a really microscopic scale," says Laura Jackisch, the head of the Fat Team. "We basically want to make the cells as comfortable as possible." That means fine-tuning their cell-culture medium in the same way you would regulate a cow's feed to maximize growth and health. For one biopsy to reach the 4.4 billion lb. of meat in Post's theoretical scenario, it would have to double 50 times. So far, Jackisch's team has made it to the mid-20s.

A lot of that has to do with the quality of the growth medium. Until recently, most cultivated-meat companies used a cell culture derived from fetal bovine serum (FBS), a pharmaceutical-industry staple that comes from the blood of calf fetuses, hardly a viable ingredient for a product that is supposed to end animal slaughter. The serum is as expensive as it is controversial, and Jackisch and her fellow scientists spent most of the past year developing a plant-based alternative. They have identified what, exactly, the cells need to thrive, and how to reproduce it in large amounts using plant products and proteins derived from yeast and bacteria. "What we have done is pretty breathtaking," she says. "Figuring out how to make a replacement [for FBS] that's also affordable means that we can actually sell this product to the masses." In May, the Fat Team fried up a couple of teaspoons. Though they could tell from the cell structure and lipid profile that they had created a near identical product, they were still astonished by the taste. "It was so intense, a rich, beefy, meaty flavor," says Jackisch, a vegan of six years. "It was an instant flashback to the days when I used to eat meat. I started craving steak again." She nearly picked up a couple on her way home from the lab that night.

FOR ALL THE SUCCESSES that cultivated-meat companies have broadcast over the past few years, biotechnologist Ricardo San Martin, research director for the UC Berkeley Alternative Meats Lab, is skeptical that lab-bench triumphs will translate into mass-market sales anytime soon, if at all. Not one of the companies currently courting investment has proved it can manufacture products at scale, he says. "They bring in all the investors and say, 'Here is our chicken.' And yes, it is really chicken, because there are chicken cells. But not very many. And not enough for a market."

Cultivated meat could have as much impact on the climate crisis as solar power and wind energy

The skepticism is justified—very few people outside of Israel and Singapore have actually been able to try cultivated meat. (Citing a pending E.U. regulatory filing, Mosa declined to let TIME try its burger. Eat Just offered a tasting but would not allow access to its labs.) And the rollout of Eat Just's chicken nuggets in Singapore raises as many questions as it answers. At the moment, the cost to produce cultivated meat hovers around $50 a pound, according to Michael Dent, a senior technology analyst at market-research company IDTechEx. Eat Just's three-nugget portion costs about $17, or 10 times as much as the local McDonald's equivalent. CEO Josh Tetrick admits that the company is losing "a lot" on every sale, but argues that the current production cost per pound "is just not relevant." At this point, says Dent, making a profit isn't the point. "It is not in itself a viable product. But it's been very, very successful at getting people talking about cultured meat. And it's been very successful in getting [Eat] Just another round of investments."

On Sept. 20, Eat Just announced that its GOOD Meat division had secured $97 million in new funding, adding to an initial $170 million publicized in May. The company also recently announced that it was partnering with the government of Qatar to build the first ever cultivated-meat facility in the Middle East outside of Israel. In June, Tetrick confirmed that the company, which also produces plant-based egg and mayonnaise products, was mulling a public listing in late 2021 or early 2022, with a possible $3 billion valuation. But all that investment still isn't enough to scale the production process to profitability, let alone to make a dent in the conventional meat industry, says Tetrick. "You can make the prettiest steak in the world in the lab, but if you can't make this stuff at large scale, it doesn't matter."

The biggest obstacle to getting the cost per pound of cell-cultivated meat below that of chicken, beef or pork, says Tetrick, is the physical equipment. GOOD Meat is currently using 1,200- and 5,000-liter bioreactors, enough to produce a few hundred pounds of meat at a time. To go large scale, which Tetrick identifies as "somewhere north of 10 million lb. per facility per year, where my mom could buy it at Walmart and my dad could pick it up at a fast-food chain," would require 100,000-liter bioreactors, which currently do not exist. Vessels that big, he says, are an engineering challenge that may take as long as five years to solve. GOOD Meat has never been able to test the capacity of cell proliferation to that extent, but Tetrick is convinced that once he has the necessary bioreactors, it will be a slam dunk.

San Martin, at UC Berkeley, says Tetrick's confidence clashes with the basics of cellular biology. Perpetual cell division may work with yeasts and bacteria, but mammalian cells are entirely different. "At a certain point, you enter the realm of physical limitations. As they grow they excrete waste. The viscosity increases to a point where you cannot get enough oxygen in and they end up suffocating in their own poo." The only way San Martin could see cellular agriculture working on the kind of scale Tetrick is talking about is if there were a breakthrough with genetic engineering. "But I don't know anyone who's gonna eat a burger made out of genetically modified lab-grown cells," he says. Mosa Meat, based in the GMO-phobic E.U., has absolutely ruled out genetic modification, and Tetrick says his current products don't use GMOs either.

That said, his rush to market has led him to rely on technologies that go against the company's slaughter-free (or cruelty-free) ethos. Not long after the company's cultivated chicken nugget was released for sale in Singapore, Tetrick revealed that FBS had been used in the production process, even though he concedes that it is "self-evidently antithetical to the idea of making meat without needing to harm a life." The company has since developed an FBS-free version, but it is not yet in use, pending regulatory review.

Eat Just's initial bait and switch left a bad taste, says Dent. Cell-cultured meat technology may be sound, but if consumers start having doubts about the product and what's in it, there could be a backlash against the industry as a whole, particularly if FBS continues to be used. "The first products are what everybody will judge the whole industry on," says Dent. He points to the botched rollout of genetically modified seeds in the 1990s as a precedent. "Despite the science pointing to GMOs being a safer, more reliable option for agriculture, they're still

[a] pariah. It could go the same way with cultured meat. If they get it wrong now, in 20 years, people will still be saying, ‘Cultured meats, uh-uh, freak meats, we aren’t touching it.’”

FOR THE MOMENT, Mosa is focused on re-creating ground beef instead of whole cuts. A ground product is easier, and cheaper, to make—the fat and muscle come out of the bioreactor as an unstructured mass, already fit for blending. Other companies, like Israel’s Aleph Farms, have opted to go straight for the holy grail of the cellular-agriculture world—a well-marbled steak—by 3-D printing the stem cells onto a collagen scaffold, the same process medical scientists are now using to grow artificial organs. So far, Aleph has only managed to produce thin strips of lean meat, and while the technology is promising, a market-ready rib eye is still years away.

Small thin slabs are exactly what Michael Selden, co-founder and CEO of the Berkeley-based startup Finless Foods, which is producing cell-cultivated tuna, wants. Few people would pay $50 for a pound of cultivated beef—15 times the cost of the conventional version—but consumers are already paying more for high-grade sushi. “Bluefin tuna sells in restaurants for $10 to $20 for two pieces of sashimi. That’s $200 a pound,” he says. Sashimi, with its thin, repeatable strips and regular fat striations, is much easier to create than a thick marbled steak, and Selden says Finless Foods has already produced something “close to perfect.” His cell-cultivated bluefin tuna is nearly identical to the original in terms of nutrition and taste profile, he says, but the texture still needs work. “It’s just a little bit crunchier than we want it to be.” But he’s confident that by the time the product makes it through the regulatory process—he’s hoping by the end of the year or early 2022—his team will have perfected the texture. If they do, it could be the first cultivated meat product on the U.S. market.

A transition to lab-grown meat doesn’t mean the end of all cows, just the end of factory farming

Cell-cultivated luxury products could be the ideal thin end of the wedge for the market, attracting conscientious—and well-heeled—consumers who want an environmentally friendly product, and thus creating space for the technological advances that will bring down the cost of commodity meat alternatives like cultivated beef and chicken. “People who are buying ethical food right now are doing the right thing, but the vast majority of people are never going to convert” when it’s only about doing the right thing, says Selden. “So we want to make stuff that competes not on morals or ethics—although it holds those values—but competes on taste, price, nutrition and availability.” Assuming they can, it will revolutionize the meat business.

“If I was in the beef industry, I would be shaking in my boots, because there’s no way that conventionally grown beef is going to be able to compete with what’s coming,” says Anthony Leiserowitz, director of the Yale Program on Climate Change Communication. There are many reasons people eat meat, ranging from the taste to religious and cultural traditions. But the bulk of meat consumption is not cultural, says Verstrate of Mosa Meat. “It’s just your average McDonald’s every day. And if for that type of consumption, if you can present an alternative that is not just similar but the same, without all those downsides that traditional meat has, then it simply makes no sense to kill animals anymore.”

Four of the world’s five largest meat companies (JBS, Cargill, Tyson and BRF) are already embracing the technology. From a market point of view, it makes sense, says Friedrich of the Good Food Institute. “These companies want to feed high-quality protein to as many people as possible, as profitably as possible. That is their entire business model. If they can make meat from plants that satisfies consumers, if they can cultivate meat from cells that tastes the same and costs less, they will shift.”

A transition to a lab-grown meat source doesn’t necessarily mean the end of all cows, just the end of factory farming. Ground beef makes up half the retail beef market in the U.S., and most of it comes from the industrial feedlots that pose the greatest environmental threats. Eliminating commodity meat, along with its ugly labor issues, elevated risks of zoonotic disease spread and animal-welfare concerns, would go a long way toward reining in the outsize impact of animal-meat production on the planet, says Friedrich. “The meat that people eat because it is cheap and convenient is what needs to be replaced. But there will always be the Alice Waterses of the world—and there are lots of them—who will happily pay more for ethically ranched meat from live animals.”

Small herds like Farmer John’s could provide both. John feeds his cows on pasture for most of the year—rather than on cattle feed, which is typically more environmentally intensive—and rotates them through his orchards in order to supplement the soil with their manure, a natural fertilizer. When he needs to feed them in the winter, he uses leftover hay from his wheat and barley crops. It’s a form of regenerative agriculture that is impossible to replicate on the large scale that industrial meat production requires to overcome its smaller margins. “We want good food for everybody. But if we do this [the old] way, we only have good food for some people,” John says. That’s why he’s willing to embrace the new technology, even if it is a threat to his way of life. “This is the future, and I’m proud that my cows are part of it.”

It’s likely to be more than a year before John can finally taste the lab-grown version of meat from his cows. Mosa is in the process of applying for regulatory approval from the E.U. In the meantime, the company is already expanding into a new space with roughly 100,000 liters of bioreactor capacity, enough to produce

Pioneering a
leaner, kinder way
making beef.
AED
BHV

The Mosa team. From left: Peter Verstrate, co-founder and chief operating officer; Maarten Bosch, CEO; Mark Post, chief scientific officer, at their headquarters in Maastricht, Netherlands, in July

several tons of meat every six to eight weeks. Richard McGeown, the chef who cooked Post's first burger on the live broadcast, is already dreaming about how he will cook and serve the next one at his restaurant in southern England. He'd like to pair it with an aged cheddar, smoky ketchup and house-made pickles. "It would do great," he says. "Everyone loves a good burger." More important, he'd love to serve something that is as good for the environment as it is good to eat.

But for those in the $386 billion-a-year cow business, a battle is brewing. As production moves from feedlot to factory, cattle ranchers stand to lose both jobs and investments. Like coal country in the era of clean energy, entire communities are at risk of being left behind, and they will fight. "The cattle industry will do everything they can to call lab-grown meat into question," says Leiserowitz. "Because once it breaks through to grocery stores, they're competing on basic stuff, like taste and price. And they know they won't be able to win."

The U.S. Cattlemen's Association has already petitioned the U.S. Department of Agriculture to limit the use of the terms *beef* and *meat* exclusively to "products derived from the flesh of a [bovine] animal, harvested in the traditional manner." A decision is pending, but if it comes down in the favor of the cattle industry, it could create a significant barrier to market adoption of cell-cultured meat, says Dent. "For a new product that consumers don't know and don't trust, the terms you can use make a critical difference. Who's going to buy something called 'lab-grown cell-protein isolates'?"

"It's meat," says Tetrick. "Even down to the genetic level, it is meat. It's just made in a different way." Tetrick, who won a similar naming battle in 2015 when his company, then known as Hampton Creek, successfully maintained the right to call its eggless mayonnaise substitute Just Mayo, says the U.S. Cattlemen's Association's complaint is as senseless as if the U.S. automotive industry had argued that Tesla couldn't use the word *car* to describe its electric vehicles, on the basis that they lacked an internal combustion engine. Still, he says, naming is critically important. As the technology has gathered speed over the past several years, terms including *cell-cultured, cultivated, slaughter-free, cell-based, clean, lab-grown* and *synthetic* have been variously used, but consensus is gathering around *cultivated meat,* which is Tetrick's term of choice.

Verstrate, at Mosa, is ambivalent. "Ultimately we're going to produce a hamburger that is delicious. We can call it meat or we can call it Joe, but if a meat lover consumes it and has the same experience as when consuming a great Wagyu burger, then we're good to go."

RAISING AFRICA'S VOICE

By Vanessa Nakate

Nakate, 24, founded the Rise Up movement, which aims to raise awareness about climate change in Africa

IN OCTOBER 2019, THE ROTARY CLUB OF Bugolobi asked me to talk on the environment and climate change. I looked forward to the opportunity. It would be the first time as an activist that I'd be addressing Ugandan professionals, many of whom were my parents' age (I'm 24). The audience would be civic-minded middle-class men and women who could raise awareness about the climate crisis and put pressure on the government and the private sector. Or they could do exactly the opposite: resist any change they perceived as slowing down what they considered "development" or "progress," and dismiss the concerns of the younger generation.

My presentation took about 20 minutes, after which the audience asked many questions. They seemed surprised to hear this information from someone so young who wasn't an expert, but were pleased I'd helped them understand the urgency of the problem. At one point, a man said how puzzled he was that the ongoing degradation of the Amazon rain forest was widely condemned, even in Africa, and yet no one was talking about the destruction of the Congo Basin rain forest. As the meeting came to an end, his statement lingered in my mind.

Why weren't Ugandans talking about what was happening in the Congo Basin rain forest, especially since the Democratic Republic of Congo (DRC), in which about 60% of the rain forest lies, borders our country to the west? I had no good answer to that question, and I had never been there myself. So I learned.

The Congo Basin rain forest ecosystem, sometimes called the world's "second lung," is, like the Amazon, rich in biodiversity. It's also vital as a global carbon sink, sequestering 600 million metric tons more carbon per year than it emits—the same amount, says the World Economic Forum, as "one-third of the CO_2 emissions from all U.S. transportation." The forest, which stretches into parts of six countries, is home to as many as 150 ethnic groups, including Indigenous peoples such as the Batwa, Bambuti and Ba'Aka. Humans have lived in the forest for more than 50,000 years, and 75 million people today depend on it to survive. The ecosystem contains 10,000 species of tropical plants—many of which may provide medicinal benefits—as well as a thousand species of birds, 700 species of fish and 400 species of mammals, including the black colobus monkey, which is vulnerable to extinction.

Also like the Amazon, the Congo Basin is being exploited for its resources. Between 2000 and 2014, an area of forest greater than the size of Bangladesh was cleared in the Congo Basin. And while the rates of deforestation in the Amazon and Southeast Asia are higher than in the Congo Basin, it's facing similar ravages. Maddeningly, in 2020, deforestation rose globally by 12%, including in many countries in the Congo Basin region, despite COVID-19's impact on the world's economies.

Scientists have calculated that unless something shifts dramatically, all of the Congo's forests may be gone by 2100.

The more I discovered what was happening to the Congo Basin, the more upset and angry I became. Why wasn't I aware of this? Well, one reason is that the

PHOTOGRAPH BY MUSTAFAH ABDULAZIZ FOR TIME

world's financial resources, including the media, are concentrated in the Global North. The stories that are shown on television, published in print and online, and shared on social media are overwhelmingly ones that are already familiar to the developed world.

As the man at the Rotary Club had observed, we're well informed about the deforestation in the Amazon, and often more aware of the biodiversity loss and threats to Indigenous populations there than we are of the biodiversity loss and threats to the original inhabitants of the Congo. A lost expanse of Congo rain forest is as destructive as one in the Amazon, yet one was making news headlines and the other wasn't. If we couldn't defend the largest forest in Africa, I thought, then how would we protect the smaller forests, including those in Uganda?

A few days after the Bugolobi talk, I began my first strike for the Congo forest, urging others to join me with their placards, take photos and spread the message online about this vital ecosystem. My first results weren't encouraging. I discovered that not only had few people heard about the environmental and human tragedy continuing in the Congo, but some weren't even aware the forest existed.

THE DESTRUCTION of the Congo rain forest is only one of the many interconnected disasters that climate change is exacerbating in Africa.

In January 2018, Cape Town in South Africa came within 90 days of running out of water. In March and April 2019, cyclones Idai and Kenneth struck the coast of Mozambique in the southeast of Africa, resulting in 2.2 million people needing urgent aid because of flooding, this in a country where 815,000 people were already in dire straits because of drought. That August, flooding in Niger affected more than 200,000 people. In November, Djibouti, in the Horn of Africa, recorded two years' worth of rainfall in a single day. In May 2020, torrential rains washed away an entire town in Somalia.

It wasn't only too much or too little water that overwhelmed the continent. In 2020, locusts destroyed 170,000 acres of crops across East Africa, putting millions of people who were already food-insecure at risk of famine—scientists have said this unprecedented phenomenon was in part due to changes in the local climate.

If these years weren't hard enough, scientists are projecting that in the next several decades the extremes will become worse, as the global mean land temperature rises beyond its current 1.2°C (2.16°F) above preindustrial levels. Between 1998 and 2018, all but one year was hotter than any previous year on record. And the temperature now considered to be "normal" is higher than ever.

So what would a 1.5°C (2.7°F) increase mean for the African continent? In blunt terms, it would be devastating. Researchers estimate that it might cause there to be more than twice as many annual heat waves in Africa by 2050. According to one study, it would subject the city of Lagos to a heat-stress burden 1,000 times what it was in the recent past. That would mean more demand for electricity, more need for water and more deaths. And this in a country where 30% of the population already has no access to clean water.

Kaossara Sani, a climate activist who lives in Lomé, Togo, is very aware of the human and environmental consequences of the climate crisis for her city and country. Sani had been volunteering to help homeless children when she encountered a 9-year-old boy from the countryside in the marketplace. He was living alone on the street, collecting plastic packaging to earn money, and wasn't in school.

"I thought to myself, This young boy's life is destroyed: like that," she told me. She couldn't understand how or why parents were sending their children from their home villages to the cities to beg. Then she found out the answer. "I realized that in rural areas, the main activity is agricultural. People depend on nature, and with climate variability and with floods, they can't support their family. They can't have good crops at the end. So the only way they have is to send their own children to the city."

For Sani, speaking out about the climate crisis became a matter of advocating for children like this little boy. "Climate change is stealing their lives," she says. "Not their future—it's already stealing their present."

SANI IS ONE of several West African climate activists focusing on the Sahel, the semiarid region that stretches from Sudan to Senegal and acts as a buffer between the expanding Sahara and the populated savannas to the south.

In November 2019, I got to know a Nigerian activist, Adenike Oladosu, when the Eleven Eleven Twelve Foundation (EETF), an organization that promotes green solutions and job opportunities to encourage economic growth in that nation, invited us both, along with Elizabeth Wathuti of Kenya, to a meeting in Ibadan, Nigeria.

In Ibadan, Oladosu told me about her campaign to draw attention to another vital African ecosystem: the Lake Chad Basin, which provides water and food for 30 million people. Among those people, nearly 11 million require humanitarian relief as a result of conflict exacerbated by the impacts of climate change.

Oladosu is campaigning to increase awareness about the social, political, economic and ecological crises in the Lake Chad Basin. She considers it a wake-up call to the entire world about what happens when an ecosystem can no longer support the numbers of people who depend on it. She writes:

A combination of decreasing rainfall, increasing temperature and other climatic elements will destroy the economic livelihood of people, be they in Africa, Europe or Asia. Lake Chad represents what the world will witness in decades … [That combination] will lead to the creation *of internally displaced persons camps, desert expansion, resource control, armed conflict and, finally, failing democracies.*

In some way, therefore, we are all Africa.

During those few days at Ibadan, Oladosu, Wathuti and I fell into an easy conversation on how we could collaborate. Wathuti told us about her project planting fruit trees in schools, and Oladosu described her work with women in communities threatened by natural disasters, and the dangers of sexual violence and abandonment that they endure as a result.

The three of us each faced similar difficulties. We recognized that many African voices were struggling to be heard—not only internationally but also within the continent and even within our own countries. We were frustrated by how few ordinary people were aware that the climate crisis was behind so many of the disasters that they called "God's will," and how difficult it was to create a uniform message on climate action that would carry weight—in our countries, regions and even globally.

Some problems lay beyond our immediate capabilities to fix, but we agreed on a few actions we could take together. We'd amplify one another's voices by sharing our work online, and emphasize to the international media the importance of the collective efforts of the growing number of climate activists we were in contact with. This way we'd show that there weren't only a handful of people in Africa fighting for climate justice, and that we echoed the concerns of people, young and old, in many countries throughout the continent.

We led a climate strike at the University of Ibadan for Lake Chad and the Congo rain forest. Later, at my presentation at the EETF event, during which Wathuti was honored, I told the attendees, "If no one is going to fight for Africa, it is because Africans are silent."

I see my task as drawing attention to communities that people may not have heard of, where lives are being upended and lost on a daily basis

I had an opportunity to take my Congo strike to COP25 in Madrid. I walked through the expo, in which national governments set up pavilions to showcase what they're doing to promote a more climate-compatible future. After some activists and I searched in vain for the Ugandan pavilion, we came across the one for the Republic of Congo (Brazzaville). There, I talked to the people staffing it about the strikes I was staging on behalf of the Congo Basin rain forest.

They were not pleased. They took turns to tell me that since I'd never been to their country or seen the rain forest, I had no comprehension of the needs of its citizens or the importance of developing the region. The people of the Congo required properly constructed houses, one of the men said, which I took to mean that the wood to build them had to come from the forest. It was a strange and unsatisfying discussion. Later, we held a strike for the Congo Basin forests in front of the pavilion. The staff I'd met earlier glared at us from a distance, and I'm sure they were happy when we returned to the conference center.

It's true, I may not fully understand the developmental needs of the people who live in or around the basin. But surely it doesn't make sense to destroy the world's "second lung" for furniture, palm oil, building materials, minerals or fossil fuels.

Some may feel it's presumptuous for any of us to claim to speak for the whole of Africa, a continent made up of 54 states, home to 1.3 billion people and encompassing hugely varied ecosystems, peoples, cultures and social conditions. And I agree that it's absurd that one individual should presume to be, or even be considered as, the spokesperson for a continent. Yet in almost every interview I've done, I've been asked not only how climate change is affecting Uganda, but also what its consequences are for other parts of Africa. I'm aware that I can provide only a snapshot of what the continent is undergoing, based on what I've learned from other activists. And I recognize that there are limits to what I can directly do to influence policy for the Congo Basin—or anywhere else, for that matter.

But I believe that we need to speak out—to "break the silence," as Sani says. I see my role in climate activism as bringing up conversations that many people have never had, and highlighting the destructive policies and investments of banks, hedge funds, multinational corporations and governments—all of which would like the rest of us to have no idea what they're up to. I see my task as drawing attention to communities that people may not have heard of, where lives are being upended and lost on a daily basis.

No country, no matter where, is just a country. What happens in the Congo Basin rain forest doesn't just affect people in countries in central Africa; it influences weather patterns across the world. The climate crisis respects no geopolitical borders, political bloc or regional trade associations. So what happens in the Congo isn't just the business of the Congolese or their neighbors. It concerns all of us.

I'll be the first to agree that we need more diversity on platforms and that more young activists should be given opportunities to talk about the challenges their countries or regions are facing. There should be 54 or 216 or 1,026 activists from every African nation-state speaking at international climate conferences and to their own governments. Every activist has a story to tell; every story has a solution to give; and every solution has a life to change.

Nakate is an activist and author of A Bigger Picture, *from which this essay is adapted*

BANKING ON ‘GREEN SWANS’

By Emily Barone

ONE FRIDAY AFTERNOON A DECADE AGO, CRISIS struck Japan. First came a 9.1-magnitude earthquake, the country’s largest ever recorded. That triggered a massive tsunami, which washed away entire towns. The tsunami then caused a meltdown at the Fukushima Daiichi nuclear power plant, 150 miles north of Tokyo.

Immediate human toll aside, the disasters also threatened to plunge the world’s third largest economy into crisis. Masaaki Shirakawa, then head of the Bank of Japan, scrambled his proverbial jets. The bank doubled its bond and asset purchases, and pumped hundreds of billions of dollars into the market to ensure that banks could keep lending. Working with other central banks, it sold yen on the foreign exchange markets to stabilize the currency. Although the disaster left 20,000 dead or missing, Japan’s financial sector withstood the shock. If it hadn’t, Shirakawa said a month later, “the adverse effects on people’s lives and economic activity probably would have been even greater.”

Shirakawa’s efforts presaged a growing consensus among today’s central bankers that they need to shore up the world’s financial systems against the economic impacts of climate change. The Japan disaster was a “black swan” event—rare, majorly disruptive and unexpected. But rising sea levels, droughts, fires, hurricanes and other extreme events from climate change—“green swans”—are inevitable.

Armed with that foresight, eight central banks and financial supervisors came together in 2017 to come up with a plan. Their group, the Network for Greening the Financial System (NGFS), has grown to 98 members, some of which are testing how regulatory policies can ready the financial system for physical destruction of life and property, asset-value losses and rising insurance premiums that come from green-swan events, as well as economic speed bumps like higher energy prices as more countries tax greenhouse-gas emissions. “[Central banks] realize the need to do things now to recognize the existence of risks of climate change and how they impact firms and people,” says Natalia Ospina, head of policy analysis at the London-based Sustainable Policy Institute at the Official Monetary and Financial Institutions Forum (OMFIF).

Unlike governments, central banks—which oversee national monetary policy—can’t issue targeted climate policies like clean-energy subsidies or carbon taxes. But they can tinker with banking regulations to make commercial banks evaluate and hedge

CARBON CONSCIOUS

Central banks are getting more involved in combatting climate change. Here’s how their policies can flow through the broader financial system and the economy

Central banks are evaluating their own climate risks ...

Central banks are **disclosing which parts of their balance sheets** face climate risks and how they will manage those risks

Some are actively decarbonizing their own portfolios by, for instance, **buying green bonds and accepting them as loan collateral**

... and calling upon financial institutions to do the same

Central-bank supervisors increasingly **require commercial banks and insurance firms to disclose** their climate risks

Central banks are **running stress tests with different climate scenarios** to see how resilient the financial system is to climate shocks against their climate-change risks, which could spur banks to do more business with greener firms.

There are questions about how far central banks can or should go with those efforts. Central bankers are not elected, and they have mandates that grant them autonomy when it comes to, say, managing inflation, but they're not meant to pick favorites in an open market. This issue is particularly sticky in the U.S. Although the nation's central bank, the Federal Reserve, joined the NGFS in December and later formed a committee to explore climate risks to financial stability, it also intends to be neutral in the market.

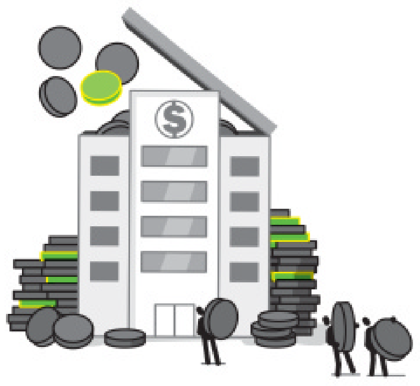
"We have a responsibility to think about how climate change impacts our existing mandates around things like safety and soundness, financial stability or monetary policy," said Kevin Stiroh, head of the supervision group at the New York Federal Reserve, at an OMFIF talk in April. "It's a long-standing Fed position that banks make their own decisions about which legal businesses they engage with."

NUMEROUS HEADS of central banks, including Christine Lagarde, president of the euro zone's, have prioritized climate. "The most important tools that are needed lie outside of our mandate," she said in January, "but the fact that we are not in the driving seat does not mean that we can simply ignore climate change, or that we do not play a role in combatting it." What that role could entail remains fuzzy. The mandates of some central banks, like those of England, France and Brazil, explicitly mention climate change. But even those banks worry about going too far, says Megan Greene, a global chief economist at advisory firm Kroll. "If they actually use their monetary policy tools to address climate change, then they are inherently picking winners and losers," she says. "They're still pretty wary of that."

So far, most central banks are still trying to figure out the risk posed by climate change. They're evaluating their own portfolios and asking—but typically not yet mandating—commercial banks to disclose which loans and assets are tied to carbon-intensive sectors or are vulnerable to green swan events. With that information, climate-progressive central banks are running predictive models to test how financial institutions would fare in different climate scenarios. These stress tests could one day lead to policies like requiring banks with greater climate risk to hold more capital. Because banks make more money by lending rather than holding their capital, such requirements may lead them to engage with greener companies and raise interest rates on loans to dirtier ones. In turn, that could push businesses to check their own risks and reduce their carbon footprints.

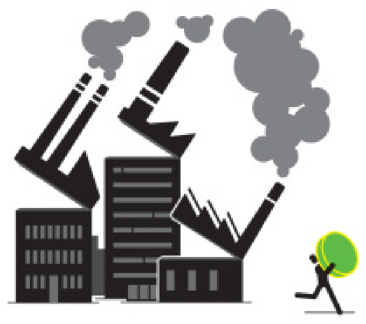
For now, the financial world is still figuring out how to assess what is "green" and what is "dirty." Without that framework, it's hard to do things like peg interest rates or collateral requirements to environmental friendliness. Another challenge: international commercial banks have noted that when climate-risk assessments are not uniform across countries, it creates an unlevel playing field. Finding common ground won't be easy, as there are at least 200 climate-risk frameworks across 40 countries, according to an International Monetary Fund analysis. On top of it all, central banks generally forecast in quarterly time frames—not the decades it will take to achieve net-zero carbon emissions.

With the debates over which assets are green vs. dirty, how to uniformly calculate them and what the climate scenario will actually be in decades' time, modeling climate exposure is like baking from a recipe that lists neither all the ingredients nor standard measuring units nor oven temperature. But as on a baking show, the clock is counting down. "We've not even completed the exploratory phase yet," said Sarah Breeden, executive director for financial stability and risk at the Bank of England, at an OMFIF conference in September. "However, we do have a code red for humanity."

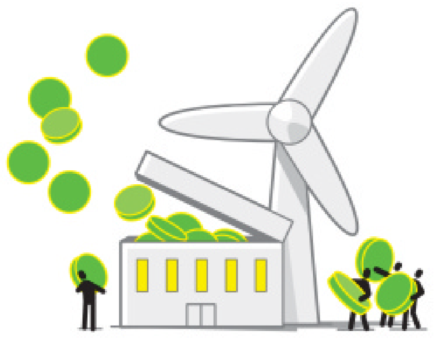


As regulators get better at measuring and assessing risk, they may eventually **require lenders to hold more capital** to cover their risks

These actions could transform investment …

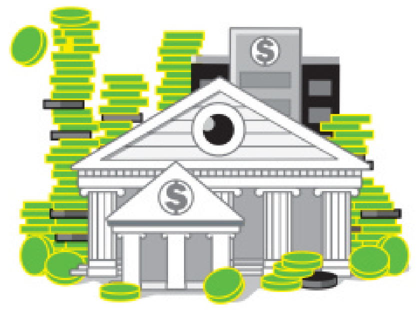


Investors may **shy away from big emitters.** Some banks offer interest rates pegged to companies' climate targets



Companies pursuing greener projects could have **an easier time raising money** in the lending and capital markets

… to help curb climate change



The financial system will be more resilient to climate disasters and will be **better prepared for the transition to a net-zero economy**

More green investment will decarbonize the economy, which will ultimately **help prevent climate disasters**

GRAPHIC BASED ON REPORTING BY EMILY BARONE WITH INPUT FROM NATALIA OSPINA (OMFIF), DAVID BARMES (POSITIVE MONEY) AND MEGAN GREENE (KROLL); GRAPHIC DESIGN BY LON TWEETEN

WHAT GREEN POWER OWES THE PEOPLE

By Amy Gunia and Aneeta Bhole/
Tennant Creek, Australia

Norman Frank's daughter Neetu and grandson Ashuan sit in the dark in order to conserve energy in his home in Tennant Creek

THE CONTENTS OF NORMAN FRANK'S fridge could mean the difference between life and death. His doctor told him to drink cold water for his kidney trouble, and to keep his medicines, which help manage his diabetes and other health problems, chilled. But he doesn't have a full-time job, and struggles to afford electricity.

So Frank, a 49-year-old Warumungu Traditional Owner—a term used in Australia to describe members of an Aboriginal group with historical claims to land—uses the power he gets from the utility company sparingly. And he says what he does use is expensive. For the home where he lives with his wife and five children in Tennant Creek, a town on the fringes of Australia's vast Northern Territory deserts, the monthly electric bill runs about $200, he says. After other necessities like rent and food, he's left with almost nothing of his government disability pension at the end of the month.

In July, the nonprofit Original Power, an Aboriginal community organization that focuses on energy issues, helped Frank install solar panels that stretch about half the length of the roof of his government-owned one-story, three-bedroom house. It seemed a wise move: with almost 300 sunny days per year, Tennant Creek has some of the clearest skies in the world. But although the physical infrastructure to produce solar energy may be in place on Frank's roof, the Northern Territory has not yet produced the corresponding bureaucratic infrastructure that will allow him to use it. It's a matter not of science but of tariff systems, prepaid meters and permissions, and without all of them, the solar panels are useless to Frank.

Meanwhile, three hours north of Frank's home, up

a two-lane highway that slices through desert scrub, sits the proposed site of what could be the world's largest solar farm. The $22 billion Sun Cable project would generate 17 to 20 gigawatts of solar power, equivalent to about 30% of what Australia's current grids can deliver. But the project is not meant to help power Frank's home, and it won't alleviate the crippling energy poverty faced by many Aboriginal communities across Australia's vast interior. The electricity it generates will be sent to Darwin, the capital and largest city of the Northern Territory, and to Singapore, via a 2,600-mile undersea cable. This isn't a new phenomenon. Extractive industries like mineral mining and fossil fuels have made Australia one of the richest countries in the world, but that wealth has accrued unequally, often bypassing the people who live on the land that is exploited.

For the world to reach net-zero emissions, solar panels and wind turbines will need to cover great expanses of the earth, and the extraction of minerals like lithium, crucial for the batteries that store power, will need to rise exponentially. All of this will require vast swaths of undeveloped land, which includes territories around the globe under the ownership or stewardship of Indigenous people.

In Australia, advocates and activists hope that the renewable push will be an opportunity to reset a historically toxic relationship between many Aboriginal communities and large-scale developers building on their land, and to address the need for more affordable energy, especially as climate change pushes temperatures to extremes. Whether Australia can transform itself into a renewable-energy superpower will also be crucial for

PHOTOGRAPHS BY ANEETA BHOLE

the world's fight against climate change. Including its fossil-fuel exports, the country's footprint is about 5% of global emissions—despite having just about 0.33% of the world's population—according to the advocacy group Climate Analytics.

But Australia's nascent green-energy revolution may already be leaving Aboriginal people behind. "Some of us aren't transitioning out of anything," says Karrina Nolan, a descendant of the Yorta Yorta people and the executive director of Original Power. "We haven't even enjoyed some of the benefits other people have had from coal mining for the last century. Some of our people don't even have power."

MORE THAN 40% of Australia's landmass is under Native Title, a law recognizing Aboriginal people have varying rights to live or hunt on the land. The relationship with the land is a fundamental part of Aboriginal identity. Modern Australian law, however, takes a less holistic view; Native Title is not the same as ownership, and Aboriginal people typically can't veto proposed projects on native-titled land that they don't want. Developers are required only to negotiate "in good faith" for six months to try to reach an agreement with the community. Sometimes, voluntary agreements include millions of dollars in compensation and other benefits like guaranteed jobs and investment in local infrastructure. But in other cases, they do not. Further, these are entirely voluntary—projects can proceed apace even if a community holding Native Title never agrees.

The legal situation reflects a stark imbalance of power between resource companies, which are some of the richest and most politically connected entities in Australia, and Aboriginal people. Peter Yu, a Yawuru man who is the former executive director of the Kimberley Land Council, an Aboriginal land-rights organization in northwest Australia, notes that Aboriginal people make up only around 3% of the Australian population: "We offer very little in terms of that in a political, parliamentary sense. So, we're vulnerable and powerless in that regard."

In addition, despite some gains after generations of discrimination, Aboriginal people as a group earn about 40% less and face unemployment rates over three times as high as non-Aboriginal Australians. Outcomes are especially bad in remote communities, where there is less economic opportunity. There are efforts to change that, but Aboriginal people especially remain marginalized and often don't have the business, legal or financial experience—or the money—to effectively negotiate with large powerful companies.

Negotiations between private companies and Aboriginal groups are often facilitated by local land councils, organizations that help Aboriginal groups manage their traditional lands. When large companies offer royalty payments to get local buy-in, it can be enticing for such councils, given that they are often tasked with acting on behalf of communities without other revenue sources. But even when companies promise things like jobs and to boost the local economy, experts say, they often overpromise and underdeliver.

Sun Cable's project is ambitious: to pair the world's largest solar farm with the world's most powerful battery, and transport the resulting power to Asia via the world's longest undersea cable. And there's been a lot of hype about the benefits it will have—for some. For example, during an Oct. 20 press conference, Eva Lawler, the Northern Territory minister for renewables and energy, said the project had already resulted in $1.7 million in spending at 70 businesses over the last financial year in Darwin, where Sun Cable is building a solar-panel-manufacturing facility. The Sun Cable project, officially dubbed the Australia-Asia PowerLink (AAPowerLink), she said, "will be a huge boost to the Territory's economy."

But those promises and press releases stand in contrast to the vague commitments that locals and activists say have been made to provide jobs and other benefits in remote communities—demonstrating that the company may be more focused on securing buy-in from government officials and getting the project, which they say is in embryonic stages, off the ground, than on the impact it will have at the local level. When asked how she'd like to see major projects like the AAPowerLink benefit remote communities, Lawler said the Sun Cable project is "a very different project to what we are talking about, necessarily, in our remote communities. In our remote communities at this stage, the demands are very small. The Sun Cable project is a huge project. That's more about—that's private enterprise, but that's more about focusing on exporting energy to Asia."

Sun Cable CEO David Griffin said in an Oct. 25 email that the company is committed to comprehensive engagement with Aboriginal and non-Aboriginal stakeholders, that it is working on a benefit plan that will include things like local procurement and workforce training, and that it is collaborating with land councils, which have a statutory responsibility to identify Native Title holders where proposed projects might take place. He said the company will seek to put in place voluntary agreements with impacted Traditional Owners providing "enduring positive outcomes." "This process takes time to identify, reach and consult with all those Traditional Owners affected by the project and the multiple communities and interest groups involved," he said.

The Northern Land Council, which represents some Aboriginal groups whose land will be impacted by the project, said in an email that it would "facilitate consultations" about such an agreement, but declined to comment on who from the communities should be approached about proposed projects or what had been done so far. Despite the promise of benefits and engagement, over a dozen people who told TIME and the Special Broadcasting Service in late September they have ancestral connections to land in Powell Creek also said they had not been

Frank in front of his Tennant Creek home. His local energy provider isn't able to connect the solar panels on his roof to the grid, making them functionally useless

fully informed about the local benefits of the project.

It's symptomatic of a disconnect that environmental groups say demands urgent attention, with several large-scale renewable-energy projects proposed to be built on Aboriginal land in Australia. "We need to think of ways to configure the world differently," says Kirsty Howey, the co-director of the Environment Centre Northern Territory, "because what we've been doing has created and entrenched not just climate change itself, but gross inequalities."

ABOUT 45 SQ. MI. of dusty scrubland around Powell Creek Station, an uninhabited block of land that was once a telegraph outpost, have been earmarked for Sun Cable's solar farm, according to the company's website. Many of the Traditional Owners of that land live in the blink-and-you-miss-it town of Elliott, an hour-and-a-half drive away.

People here take extreme measures to save on power and adapt to the heat. It's not uncommon for an entire family to sleep in one room so that only one air-conditioning unit needs to run overnight. Others move their mattresses outside, where it's cooler at night. It's standard operation to keep flashlights and camping lanterns around the house to use instead of turning on the lights.

"It's cooler when you've got the lights off … I sit here just under the fan. I've got one air-con that I don't use," Elizabeth Henderson, a Mudburra woman who lives in the town, said in September, which in Australia is the first month of spring. "I've got the windows open, it's all right." Outside, there was almost no movement on the streets at midday, as people sheltered from the 97°F heat. Inside, the homes were mostly dark, lit only by the sunlight coming in through open doors and windows.

Elliott is a tight-knit community, and a conversation with one resident about the Sun Cable project quickly turned into a gathering of more than 20, many of whom went between discussing the issue in English and in Jingili and Mudburra, two of several languages spoken in the area. Many were angry that they did not know more about development plans—they had heard about a meeting being held in Elliott, but were unsure about dates or how to attend. Some said they'd heard that Sun Cable had spoken directly to a few locals about the plans and meeting, but those locals had not distributed the information to the rest of the community.

"We have a past through Powell Creek; it's our great-grandmothers' traditional land and now it's our land," said Dan Bostock, 41, a Jingili and Mudburra man. "We are the right people to talk to and deserve to know what's going on and what's going to be carried on throughout our land." Bostock says he did attend one meeting about Sun Cable's planned location, where he asked company representatives what the local benefits would be—he recalls specifically asking whether the project could help provide electricity to the community. He also recalls getting no clear answer.

This sort of discord isn't inherent in renewable-energy development. Indeed, there are more than 100 medium- to large-scale clean-energy projects operating across Canada that have active Indigenous ownership or co-ownership, and a slew of government policies and programs aimed at helping Indigenous communities access financing. For example, about 1,000 miles north of Vancouver in the shadow of the northern Rocky Mountains, the Fort Nelson First Nation is working to transform an almost depleted natural gas field into a geothermal-energy project. The project is expected to generate up to 15 megawatts of electricity in its initial phase—enough to power about 10,000 homes. Fort Nelson First Nation plans to use excess heat to warm homes in the area and build dozens of greenhouses to grow food during the frigid winter months, when temperatures hover around 0°F. "Major projects are one of the few development opportunities that can bring meaningful change to our communities," says Sharleen Gale, the chief of the Fort Nelson First Nation. "We think that this geothermal project is really a gift from our ancestors, being able to harness the heat from the earth."

Across the U.S. border, on the windswept Great Plains, six Native American tribes have formed the Oceti Sakowin Power Authority (OSPA), which is working to bring the first utility-scale wind-power projects to tribal lands. "These are our natural resources, our lands. I think we should have a say over how they're used," says Lyle Jack, the chairman of OSPA.

> **'What we've been doing has created and entrenched not just climate change itself, but gross inequalities.'**
>
> **—Kirsty Howey**

Even elsewhere in Australia—some 2,000 miles from Elliott, on the southwestern coast of the country—another renewable-energy megaproject is putting itself forward as an example of how the green-energy revolution could develop alongside Aboriginal people. The $75 billion Western Green Energy Hub (WGEH) will take up an area larger than Connecticut, on the traditional lands of the Western Australia Mirning People. The Mirning have been given a minority equity stake in WGEH, as well as a permanent seat on the board of the consortium running the project. Its corporate charter also includes promises to create "shared well-being," not to undertake activities on Mirning land that they don't agree with, and to recognize and try to fix the "historic and ongoing disadvantage" that Aboriginal people face.

Brendan Hammond, the chairman of the board of the WGEH, says that although there aren't laws mandating that it partner with the Mirning in this way, he thinks a new playbook is necessary for how project developers engage with local communities. "Legislation is put there as a bare-minimum criteria," he says. "Our job is to operate not just inside the guardrails, but way, way, way, way, way beyond."

Some opposition lawmakers are pushing for legislation to enforce greater cooperation in Australia. Independent member of parliament Helen Haines has introduced legislation that would establish an agency to support the development of community-driven renewable-energy projects. It also sets out a requirement for any new large-scale renewable developments to offer 20% of the ownership to local communities. Haines says the plan would ensure that there is "genuine and legitimate consultation with local communities," but it remains unclear how such communities could afford to put up the funds for that sort of stake in multibillion-dollar projects.

NO MATTER WHAT the law sets out, some businesspeople with experience in mining say it's simply bad business not to offer wide-ranging benefits to Aboriginal communities when undertaking projects in them. "There's lots of agreements in place with mining companies which are very transactional, like, you pay us the money and we'll just look the other way, and ultimately they fail everybody," says Bruce Harvey, who spent more than 30 years at mining giant Rio Tinto. For example, he points to plans by foreign developers to build a wind park in Oaxaca, Mexico, which triggered protests—and the suspension of the project—from Indigenous communities claiming that adequate consultation had not occurred. And on the flip side, he notes how when the company OZ Minerals wanted to develop a copper mine in South Australia, the firm created a comprehensive partnership agreement with the Kokatha People living on the land, and the two groups now work together on a wide range of issues.

Harvey says renewable-energy projects, which may be in operation for decades, have a special responsibility to build better ties with local communities—to ensure that sustainability is defined by respect not just for the land but also for its historic stewards. "Presuming that you've got a green halo because you're in a renewable-energy business doesn't mean you automatically will be doing everything that's acceptable and right by local people," he says. "If you're paying homage to a global concern, very frequently you're riding roughshod over local concerns." *—With reporting by* ELOISE BARRY/LONDON

This story was produced in partnership with the Special Broadcasting Service (SBS), Australia's multicultural and multilingual broadcaster. SBS correspondent Aneeta Bhole reported from the Northern Territory

TIME

CAN THE WORLD COME TOGETHER TO SOLVE CLIMATE CHANGE?

Find out in our daily newsletter from the COP26 summit

GLASGOW, SCOTLAND
OCT. 31 to NOV. 12

BIG INTERVIEWS. KEY UPDATES. TRUSTED ANALYSIS.

SIGN UP AT TIME.COM/CLIMATE-NEWSLETTER

Bulgaria

AT THE STRATEGIC CROSSROADS OF EUROPE

TRACE GROUP HOLD Plc – Building for the Future

In the three decades since Bulgaria began its journey from one-party state to parliamentary democracy, the Balkan country on the Black Sea has also undergone a significant social and economic transformation. It has been a gradual rather than dramatic change from a highly centralized, planned economy to an open, market-based, upper-middle-income country at the heart of the European Union (EU).

Bulgaria secured membership in the EU in 2007, and since then incomes have risen sharply, with billions of euros flowing into the country's industries. EU membership has worked to Brussels' advantage as well as Sofia's because Bulgaria's geographic location means that the development of its transport infrastructure is vital to the EU's plans to link central Europe with the Mediterranean to the south and with routes north to Germany.

Most of the projects required to realize this objective are enshrined in the EU's Trans-European Transport Network (TEN-T) initiative. Part of the wider Orient/East Mediterranean corridor, TEN-T is the vehicle through which Brussels is channeling funding for the network of airports, roads, railways and water infrastructure that will eventually form a seamless east-west trading and transport corridor.

Founded in 1996 by Prof. Eng. Nikolay Mihaylov, PhD, who is still majority shareholder, the Sofia-based Trace Group Hold has been actively involved in several of these Ten-T projects. Underwritten by $450 million of EU financing, the modernization of the railway infrastructure between the cities of Plovdiv and Burgas in the southeast of the country is among the most important and financially substantial of these projects.

Eng. Boyan Delchev,
CEO of Trace Group Hold Plc

Trace Group, which was listed on the Bulgarian Stock Exchange in 2007, has also been involved in a long list of other specifically Bulgarian flagship infrastructure initiatives. These include the Sofia Metro development, where, as prime contractor, the company has played a major role in the highly complex construction of 45 stations and 31 miles of track. Elsewhere, Trace has helped build Sofia Civil Airport and several wastewater and sewage treatment facilities. The company was also entrusted with several special-purpose projects, such as the reconstruction of the Graf Ignatievo Air Base, a military installation.

Along with the capital's new metro system and its extensive work in the upgrading of Bulgaria's road and rail networks, Trace is also responsible for Bulgaria's first state intermodal terminal in Plovdiv. The expertise and quality of its work is best appreciated by a visit to such structures as the Trapezitsa roundabout in Burgas and the Western Arc of Sofia's ring road, both of which are masterpieces in their combination of traffic and pedestrian flow planning and execution. Over the years, Trace has won several awards for its work, most recently for the design, development and reconstruction of a major overpass in Stara Zagora.

Trace's technical and organizational skills have clearly played a large part in its success, but so too has the company's ability to work constructively in partnership with blue-chip multinationals, including Siemens and Alstom. "We have a successful track record in partnering with some of the EU's most experienced logistics and building materials suppliers," says CEO Boyan Delchev. "This means we can always rely on sourcing the best products and services."

Outside Bulgaria, Trace Group Hold acquired a majority stake in the Vior Velika Morava engineering company back in 2008, followed by the acquisition of PZP's Niz and Vranje subsidiaries in 2015. Three years later these businesses were merged into Trace Serbia, which since then has been instrumental in upgrading some of the country's major highways. The Group also has subsidiaries registered in Germany, Ukraine and North Macedonia, and has been involved in several projects in Prague.

Romania is next. "We calculate that over the next five to seven years contracts worth a combined total of $100 billion could be put out to tender as Romania finally comes to grips with its road and rail problems," Delchev predicts. "We would hope to be in the running for at least $1.5 billion of that."

As the company prepares to celebrate its 25th anniversary and Delchev ponders where Trace Group Hold might be in another quarter century, the prospect of bringing the company's skill and experience to bear in projects in Europe, Asia, the Middle East and Africa is coming into view. In partnership, of course, but only with the best.

25 YEARS TRACE

EUROHOLD – A Secure Investment

The economies of Central and Eastern Europe (CEE) have enjoyed strong and sustained growth for more than two decades, with real GDP per capita rising by as much as 800% in certain instances. It is generally agreed that the future holds more of the same and, post-COVID, the region is expected to grow annually by more than 4%.

Assen Christov,
Chairman of the Supervisory Board for Eurohold

This is good news for the insurance industry, as increases in disposable income tend to translate into a higher take-up of most forms of personal insurance. It is particularly good news for Eurohold, the Bulgarian conglomerate that since its launch in 1997 has grown from a relatively small insurer with a handful of offices in Bulgaria's main towns and cities into the country's largest publicly-listed holding company with subsidiary operations in 14 European countries. Over the last two decades, its annual revenue has grown strongly and steadily to $1.5 billion, from $14 million. Eurohold's range of products and services now include financial services (predominantly non-life) insurance, car sales, leasing, asset management and (of increasing importance) power distribution, supply and sales.

That growth has largely been fueled by a succession of 30 acquisitions across the region, many of which have found a home in Eurohold's Euroins Insurance Group (EIG) subsidiary, which was originally incorporated in Bulgaria in 1998. EIG turned out to be the preferred M&A partner of major international players and leaders in the sector that had decided to divest their holdings in the region and focus on their core markets. The latest addition to EIG's insurance portfolio has been the Belarussian subsidiary of German-based ERGO, one of the major insurance groups in Europe and part of Munich Re. Prior to this, EIG had acquired the subsidiaries and portfolios of QBE, TALANX and others.

In September, Eurohold and the European Bank for Reconstruction and Development (EBRD) agreed on the acquisition of a minority stake in Euroins Insurance Group AD (EIG). EBRD's €30 million investment in EIG will be carried out through a capital increase of the insurance group. Eurohold will also participate in the capital increase procedure with a further equity capital injection of up to €12 million.

There will be more such acquisitions, according to Eurohold chairman Assen Milkov Christov. "We have developed a top insurance group that operates right across the CEE, SEE and the former Soviet Union which already provides insurance services to four million clients," he says. "The company is well positioned to grow further within a market estimated to be worth nearly $50 billion, and which is still largely untapped with a huge potential for growth."

With such a promising market on his doorstep, Christov understandably has his focus on these three overlapping regions and sees an opportunity to replicate Eurohold's success in insurance in other sectors, with energy at the top of the list.

Last year Eurohold acquired a majority stake in the Bulgarian operations of the Czech-based CEZ for $396 million and folded it into its Dutch-based Eastern European Electric Company (EEEC) subsidiary. Christov has described the acquisition as a milestone for both the country and company.

And he certainly appears to have good reason to feel optimistic about the transition. "By purchasing CEZ Group's assets, we have taken control of the largest supplier and distributor of electricity in Bulgaria," he says. "In the process, we have also acquired nearly 3 million customers nationwide, many of them located in the capital Sofia." Christov believes the acquisition will help Eurohold develop EEEC into one of the leading utility service providers in Southeastern Europe and beyond.

Energy and insurance may seem odd bedfellows, but not to Christov. "Eurohold has already developed a business model that operates non-life insurance with car sales and leasing under one roof, and with the acquisition of CEZ we are adding energy and utility services as well," he explains. "We have identified a lot of potential synergies and cross-selling opportunities which our clients and customers will soon be able to take advantage of. This will also add value for our investors, and the move into energy will protect them from future recessions and economic shocks."

The history of the mergers and acquisitions is replete with promises of synergies that never materialized, but Christov has a track record of getting these things right. Eurohold's assets have grown from $9 million to $1.8 billion in 23 years. He forecasts that by 2025, Eurohold's revenues and earnings before tax and interest will exceed $2.4 billion and $240 million, respectively, which will make it large enough to consider a market listing of some kind in London or New York.

Eurohold had little trouble raising the $95 million it needed to buy the CEZ subsidiaries through a public offering of new shares, a clear signal the investment and banking communities are on board. This past summer, the company received a further vote of confidence in both its competence and the social and economic importance of the sectors in which it operates when the EBRD agreed to take a stake in EIG. Eurohold's future is energized.

EUROHOLD

MONBAT GROUP –
European Power Player

The current post-COVID surge in demand for plug-in vehicles, state-of-the-art smartphone apps and energy storage capacity is fueling a seemingly relentless demand for lithium-ion rechargeable batteries.

Yet while their high-energy density, low discharge rate and basic versatility mean that the lithium-ion battery market is expected to grow from $41 billion in 2021, to $116 billion by 2030, vast swathes of the industrial world still rely on lead-acid batteries. Thanks largely to their tried and tested technology and cost effectiveness, demand for lead-acid batteries is also booming and is expected to underpin a market of its own that will be worth $77 billion by 2026.

Monbat Group has a foot in both camps. Set up as a state-owned enterprise in 1959 in the northwestern Bulgarian town of Montana to supply the Soviet Union with lead-acid batteries to support its heavy-industry expansion strategy, the company was acquired by the Bobokov brothers in 1998. Since then, Monbat Group has grown into one of the largest battery producers in Europe by pursuing a policy of market and product diversification. In addition to selling into more than 70 countries around the world, Monbat has also extended its range of products and service to include lithium-ion batteries and the recycling of the lead, lead alloys and the regranulated polypropylene used in conventional battery production.

It's a successful formula. Between 2012 and 2020, sales grew by 66% and topped $200 million when the pandemic hit. Now, according to Monbat Group majority shareholder Atanas Stoilov Bobokov, the company has regained its forward momentum. "COVID slowed us down," he concedes, "but our plans for the next five years remain ambitious."

Those plans are also highly focused. Despite the enthusiasm surrounding lithium-ion batteries, Bobokov is confident that demand for the company's historically core lead-acid battery range of products will continue to grow for several decades to come, although client requirements will almost certainly evolve. In 2018, in anticipation of this, the company acquired the license for Advanced Battery Concepts' GreenSeal bipolar technology, which drastically simplifies lead battery manufacturing and significantly improves performance by increasing cycle life, lowering weight, reducing recharge time and improving reliability, while also being fully recyclable.

"THE TECHNOLOGY CORRESPONDS PERFECTLY WITH NEW REGULATIONS IN THE EU AND REQUIREMENTS ELSEWHERE," SAYS BOBOKOV. MONBAT GROUP IS NOW LOOKING FOR INVESTORS TO HELP DEVELOP THE WORLD'S FIRST MANUFACTURING PLANT CAPABLE OF PRODUCING BATTERIES THAT FULLY UTILIZE THE NEW TECHNOLOGY, WHILE ALSO PROVIDING FACILITIES TO EXPLORE NEW TRENDS IN THE RESERVE POWER MARKET.

Bobokov and his colleagues have identified opportunities in the lithium-ion battery market that will avoid putting them on a competitive collision course with major European, Chinese and US manufacturers. "We would like to specialize in high-power lithium-ion batteries that are used by smaller industrial segments than those designed for electric vehicles, for instance," he says. "These are niches that we don't think will be of interest to the industry giants because the numbers are smaller and the markets are more fragmented."

Ferry boats offer one such opportunity. A new EU directive stipulates that no ship or other vessel is allowed to enter a port with its main engine on, meaning that they will have to rely on their auxiliary back-ups. "Although this is a niche market, we believe that there is every chance it could become a big one," he says. "But developing it is going to be a capital-intensive exercise, and we are looking for a partner to work with us. If we can find the right one, we could build a showcase plant in Bulgaria and then replicate it anywhere else in the world we wanted."

Atanas Stoilov Bobokov
Majority Shareholder Monbat Group

Montana is located at the very heart of the Balkans, and over the years the company has made full use of this to push into markets in both Western and Eastern Europe. Now, as the cost and weight of rechargeable power units continue to drop, demand is increasing across countries where access to electrical grids remains patchy. The starter battery segment is also showing no signs of a slowdown. "A steadily greater proportion of our sales is now coming from regions where electrification will not come anytime soon," says Bobokov. While this has resulted in Monbat Group's pan-African footprint growing, the quality of its products and its competitive pricing have also led to more orders from several developed Far East markets, including Japan and Taiwan.

With all three business lines facing towards growth markets, Bobokov is now looking for partners in earnest. "Our challenge is not our products or their market potential, it is meeting the demand with the current production capacity."

MONBAT®
GROUP

TimeOff

ENDURING ENIGMA
Princess Diana's legacy shapeshifts as it is continuously revisited onscreen

INSIDE

A POST-BREAKUP ROM-COM FROM A MALE PERSPECTIVE

A QUIRKY, ANACHRONISTIC LOVE LETTER TO EMILY DICKINSON

A YA NOVELIST BLENDING SCIENCE AND NATIVE STORIES

PHOTO-ILLUSTRATION BY ANTHONY GERACE FOR TIME

ESSAY

The elusive Diana of the imagination

By Stephanie Zacharek

FOR A BRIEF TIME WE KNEW HER AS LADY DI, AND for a longer span as Princess Diana. But in the end, whether you loved or loathed what she stood for, no appellation felt adequate. By the time the former HRH the Princess of Wales died in a car crash in 1997, at age 36, she had become just Diana, one name with a complicated set of ambitions, joys and disappointments folded within its petals. You can adore her or decry her as a wily social climber. The one thing you can't do is stop looking at her: 24 years after her death, her specter is finding life everywhere, on TV, in the movies and on Broadway. In our imaginations, at least, Diana is more alive than ever.

She is also more mysterious, an enigma worthy of exploration, something many of us didn't feel about her 10 or 20 years ago. For a long time—the tragic nature of her death aside, a terrible fate for any human being—it was easy to take her for granted, even to roll your eyes at her a little. As a royal, she looked fantastic in clothes—but didn't she also wear a pullover with little sheep knitted in, a fashion choice that, pre-grannycore, swerved a little too close to the jeering trend of the ugly Christmas sweater? And if the Diana story was in some ways incredibly sad—her Prince turned out to be a dud in the husband department, deeply in love with another woman the whole time—she was also canny enough to know how to play to her crowd. The "shy Di" Prince Charles first courted—a nursery-school helper with a habit of inclining her head such that her eyes were almost completely hidden by the blondish swoop of her bangs—later became a poised, polished young matron who publicly spilled royal secrets, avowing not so-subtly that she had married into a family of monsters. Even if you had sympathy for her, the superstar-victim routine could be distasteful.

SO HOW SHOULD WE FEEL today about Diana? The buffet of choices is so large that she can be almost anyone we want. In 2016, Chilean filmmaker Pablo Larraín released *Jackie,* starring Natalie Portman, an intimate fantasy portrait of Jacqueline Kennedy. Now, with *Spencer,* Larraín attempts the same treatment for Diana, with Kristen Stewart as the tragic Princess.

Spencer takes place in December 1991, over a dismal Christmas holiday at Sandringham, the royal family's country retreat, during which Diana decides to leave Prince Charles for good. But the movie feels less like a cry of the heart than a parody of a parody. Stewart's Diana is so unpleasantly self-centered that she'd be a terrible guest at any Christmas affair. She's late for every meal and complains, endlessly, that the family hates her and is trying to paint her as crazy. Meanwhile, she skulks about with her shoulders hitched to her ears, looking as if she's about to pocket some of the royal silverware.

A title card at the movie's start informs us that *Spencer* is A FABLE FROM A TRUE TRAGEDY, and Larraín weaves in fairy-tale elements like so many threads of Lurex. Anne Boleyn makes a heavily symbolic appearance at the royal Christmas Eve dinner table, one unfortunate Queen blinking a warning to a woman who seems headed for a similar fate. Stewart, generally a marvelous actor, plays Diana as a mannered doe—the performance is packed with calculation and guile. Larraín may be trying to dive into the satin-and-sadness psyche of a misunderstood and persecuted woman. But he inadvertently turns this Diana into exactly the thing the royal family accused the real-life Diana of being: a willful and pouty complainer, or, worse, a megalomaniac. With friends like these, Diana doesn't

PREVIOUS SPREAD: DIANA: GETTY IMAGES; THE CROWN: NETFLIX (2); SPENCER: NEON; THIS PAGE: ANTHONY GERACE FOR TIME (SOURCE PHOTO: GETTY IMAGES)

need enemies.

Spencer is heavily engineered to be one of those classy movies that wins awards. But the song-and-dance extravaganza *Diana: The Musical* is a work Diana herself—known to be a fan of spectacles like *The Phantom of the Opera*—would more likely warm to. The show—with music and lyrics by David Bryan and Joe DiPietro, and a book by DiPietro—was set to open on Broadway in spring 2020, before the pandemic brought the curtain down. The live show will finally go on as planned this November, but there's a filmed version of the production available to watch right now, on Netflix.

Is *Diana: The Musical* any good? Not exactly. The early numbers, especially—during the part of the show that details the meeting and courtship of the young Diana and her Prince-to-be—are bright, cheerful and chirpy. The show's star, Jeanna de Waal, bursts onto the stage with a peppy-Princess number about being underestimated, which just happens to be called "Underestimated": "Your prison has been built/ your downfall's been devised/ Won't they be surprised/ when you're underestimated?"

> **In our imaginations, Diana is more alive than ever, an enigma worthy of exploration**

The whole thing feels a bit self-helpy, cheerleaderish. But in a strange way, *Diana: The Musical*—an effervescently pro-Diana entertainment that also acknowledges how much the young Diana craved the spotlight, only to be burned by it—is a more honest work than *Spencer.* There's nothing arty or arch about it; you can imagine Diana herself humming the songs, tickled to see her own reflection in them, and pleased as punch that she could inspire a Broadway show. Who wouldn't like that kind of fame, rendered in a sweet, harmless form—especially Diana, who was first made famous by photographers and then, years later, almost literally hounded to death by them? A Broadway musical, even a silly one, isn't the worst memorial for a woman who came to be known as the People's Princess.

YET OF ALL THESE recent portrayals, it's Emma Corrin's, in the fourth season of Netflix's fiction-based-on-fact drama *The Crown,* that comes closest to capturing Diana's opalescent mystery. Corrin's Diana first appears as a schoolgirl dressed as a tree sprite for a student production of *A Midsummer Night's Dream.* Charles (Josh O'Connor) has come to the family home, Althorp, to pick up her older sister Sarah for a date; he spies the young Diana sneaking around in her tights, an awkwardly gamine adolescent who's trying not to be seen—and yet clearly, desperately, wants to be seen, especially by a real-life Prince.

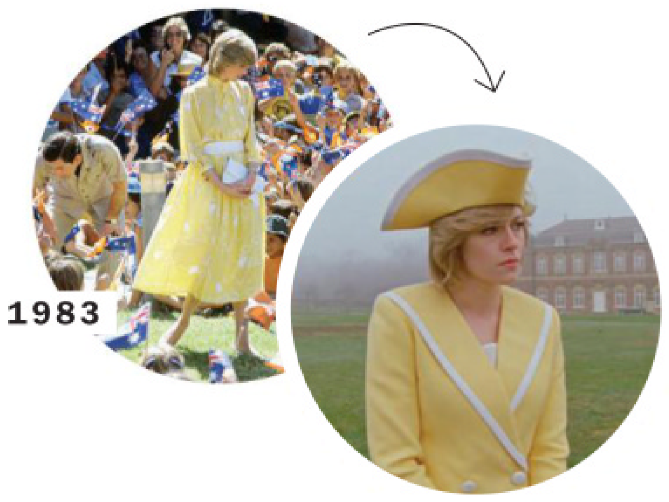
This scene is marvelous for the way it asks—without necessarily answering: Had Diana been scheming, from a young age, her way into the royal palace? And then comes the kicker: So what if she had? It's common for young girls to yearn for fame, to dream of being acknowledged as charming and beautiful, to want to be *seen.* Corrin, so mischievous and flirty in those early scenes, helps us see that ambition in the very young Diana. But we also see how, just a few years later, that delight gives way to a particularly cruel disillusionment. In *The Crown,* days before the royal wedding, Diana discovers that her fiancé has recently designed a gold bracelet as a "farewell" gift for his not-really-an-ex, the married Camilla Parker Bowles. (Though *The Crown* is fictional, this anecdote is essentially factual.) The future Princess sees she has been betrayed; she wants to back out of the marriage, but it's too late.

The Crown shows the stricken bride in that puffy meringue of a wedding dress. Corrin's Diana looks so very small; as seen here, that dress—at the time a sighworthy symbol of fairy-tale fantasy—may as well be a white wolf eating her alive. Young Diana Spencer got the prize she thought she wanted, and when she realized how hollow it was, she reinvented herself to fit into her strange, unhappy surroundings—and then reinvented herself again to get out. No wonder we have no idea who she really was; she died on her way to becoming that person, leaving behind a jumble of puzzle pieces that will never be an easy fit.

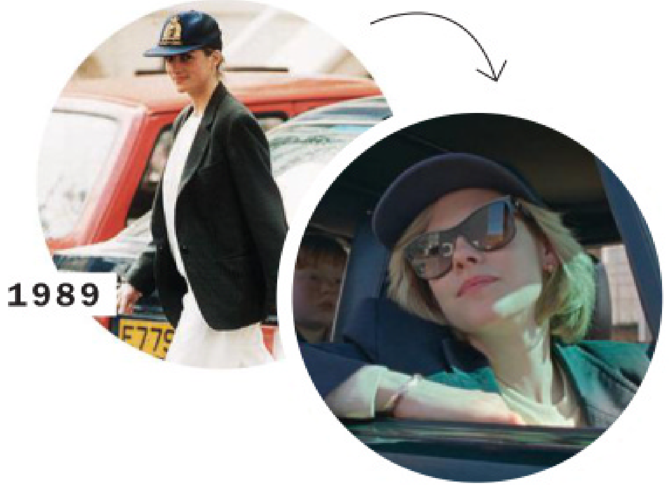
FASHION

Behind the styles

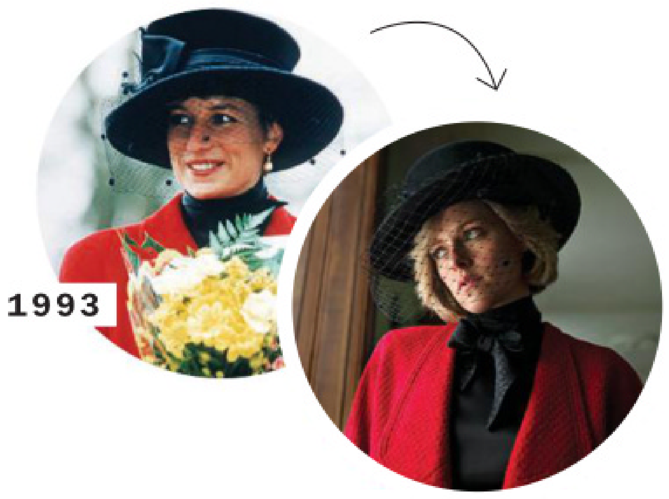
Princess Diana spent half her life in the public eye, no stranger to the power of presentation: her royal wardrobe functioned as both diplomacy and armor. But fashion, as seen in Kristen Stewart's costumes in *Spencer* and in real life, also served as a way for Diana to reclaim her narrative, especially as she broke away from the palace. —*Cady Lang*



Shy Di
Diana's looks as a young Princess were feminine and innocent, a stark contrast to the sleeker, sophisticated style she would later adopt



The people's Princess
Diana's post-HRH penchant for mixing high and low fashion—like this blazer, sweatpants and baseball cap—made her glamour feel relatable



Lady in red
In *Spencer,* Diana's selection of this bold red coat and hat acts a metaphor for the way she is chafing at the highly controlled aspects of royal life

DIANA: GETTY IMAGES (3); SPENCER: NEON (3)

Harper plays a divorcé back on the market, seeking self-awareness with every date

HBO MAX

REVIEW

He's loved and he's lost

By Judy Berman

IT'S AN OLD STORY. JUST WHEN YOU THINK YOU KNOW where your life is heading, somebody comes along and shoves you off that path. One such transition shapes the smart second season of *Love Life*, an HBO Max anthology series that follows the romantic travails of a new character each season.

This edition opens with Marcus Watkins, a married book editor played by William Jackson Harper, meeting his potential soulmate Mia Hines (Jessica Williams) at a wedding. (Season 1 viewers will recognize Anna Kendrick's Darby as the bride.) Small talk leads to an "emotional affair" that hastens the end of Marcus' marriage. Instead of hopping over to Mia's path, however, as he'd hoped, he's left lost in the woods, not just single but also fundamentally confused as to who he is and what he wants. The scenario yields a far fresher story than Kendrick's generic single-girl-in-the-city tale.

Like its predecessor, the season speeds through Marcus' entanglements at the rate of roughly one per episode, from the eager but inexperienced college girl (Aline Mayagoitia) to the older beauty who pays for fancy hotels (Leslie Bibb). But at its core is the identity crisis his feelings for Mia set into motion. A brainy guy who's tired of having to prove his authenticity to people—like a cocky young author he's courting—who judge him for not being "Black enough," and exhausted by white people who compare him to Obama, Marcus also has a strained relationship with his hard-to-please dad (John Earl Jelks). That tension doesn't seem at all unrelated to his struggle to define Black masculinity on his own terms.

Women don't have a monopoly on post-breakup identity crises

As Mia drifts in and out of his life, hauling her own truckload of baggage, it's through introspection, experience and accountability that Marcus approaches that elusive quality: maturity. *Love Life* isn't the first rom-com to trace a character's emotional coming-of-age through successive relationships, but Harper's subtle, unaffected performance and the insight with which the people in his life are written and cast save it from the glibness of works like John Cusack's *High Fidelity*. Punkie Johnson is a particular standout as Marcus' lady-killer sister Ida, while her *Saturday Night Live* castmate Ego Nwodim brings nuance to Ola, a woo-woo playwright girlfriend of Marcus' who might have otherwise come off as a caricature.

ONSCREEN ROMANCE HAS evolved quite a bit since *The Philadelphia Story*—and even since *Notting Hill*. We've seen the genre diversify with movies like *Crazy Rich Asians* and shows like *Insecure*. *The L Word*, *Looking* and *The Half of It* have explored queer romance. Yet we still don't see many love stories that examine the difficulties a man, let alone a Black man, might have to work through in forming an identity independent of his long-term partner. There is no male equivalent to *Alice Doesn't Live Here Anymore*. HBO's recent gender-flipped remake of Ingmar Bergman's *Scenes From a Marriage* felt forced.

There are good reasons why finding oneself post-breakup has become an archetypally female narrative. Even when we aren't cutting ties with abusive partners, women face a unique pressure to please. But women don't have a monopoly on identity crises. Whether he's putting up with his white boss's microaggressions or contorting himself to fit Ola's idealized conception of "Black love," the Marcus we meet lives largely on other people's terms. Only in interrogating everything about his life—his family, friendships, career and his romantic relationships—can he become a person who's ready for real love. As RuPaul might say: If you can't fulfill your own emotional needs, how the *hell* are you gonna fulfill anyone else's?

LOVE LIFE *returns to HBO Max on Oct. 28*

An activist looks back

REVIEW

Kaepernick's origin story

Natural talent helps, but icons are made, not born. *Colin in Black and White,* from co-creators Ava DuVernay and Colin Kaepernick, traces that process, connecting the iconic pro footballer turned activist of 2021 to the teen athlete he was in the early 2000s.

Jaden Michael from *The Get Down* stars as the young Colin, a biracial boy growing up with white adoptive parents (played by a clean-shaven Nick Offerman and a pinched Mary-Louise Parker) in a conservative town. His run-ins with prejudiced cops and coaches—exacerbated by his mom and dad's well-meaning obliviousness—become case studies in white privilege and systemic racism. The real Kaepernick hosts each episode, offering primers on everything from Black hair to the birth of hip-hop.

That these are such worthy topics makes the show's dry, awkward execution all the more disappointing. Colin's parents often seem so clueless as to who their son is, it's as though they've only recently met him. Kaepernick's mini-lessons have a PowerPoint vibe. *Colin* might work as a teaching tool, but as topical entertainment, it's a long third quarter.

—*Judy Berman*

COLIN IN BLACK AND WHITE *comes to Netflix on Oct. 29*

COLIN IN BLACK AND WHITE: NETFLIX; DICKINSON: APPLE TV+

REVIEW

Emily in Amherst

APPLE TV+ ENTERED THE STREAMING race in 2019 with a small but splashy stable of originals. *The Morning Show* had Jennifer Aniston and Reese Witherspoon. *For All Mankind* paired *Battlestar Galactica*'s creator with an alternate history of the space race. *See* spent millions per episode on Jason Momoa tromping through forests. And then there was *Dickinson,* an odd, anachronistic period piece from first-time creator Alena Smith that cast Hailee Steinfeld as a young Emily Dickinson.

> *'I dwell in Possibility—/ A fairer House than Prose'*
>
> **EMILY DICKINSON**

Surprisingly, *Dickinson* became the breakout. Smith's bizarre creation caught on because it felt alive and impassioned in its messiness. That momentum persisted and suffuses the show's third, final and most ambitious season. Rooted in an intelligent, wild, sensuous performance from Steinfeld, *Dickinson* remixes facts and conjectures about the poet's life into an exuberantly implausible family dramedy. We meet Emily on the precipice of adulthood. She has found the love of her life in her best friend, Sue (Ella Hunt), who's destined to wed Emily's brother, Austin (Adrian Blake Enscoe). To her family's dismay, the rebellious Emily has no intention of marrying. Why would she waste her life keeping house when she could be writing brilliant poetry? Also, she sees things—like a horse-drawn carriage whose passenger is Death, personified by rapper Wiz Khalifa.

As this detail suggests, the show mixes realism and fantasy, 19th century and 21st. Alongside a punchy pop soundtrack, Smith peppers the dialogue with contemporary notions; "I just don't know why this had to happen in our 20s," someone whines about the Civil War. This style can be jarring, but it's no gimmick. It recontextualizes Dickinson and her poetry, scribbling over stiff black-and-white portraits to reveal a truly colorful character.

Following a sharp second season in which Emily grappled with fame, Season 3 finds her pondering her role during wartime. By intertwining her story with that of a Black journalist who travels to aid the abolitionist cause, *Dickinson* leaves us with a timely message: even in the darkest days, words matter. —J.B.

DICKINSON *returns Nov. 5 on Apple TV+*

Dickinson *has a freshness that belies its 19th century setting*

PROFILE

Darcie Little Badger will tell you the story

By Annabel Gutterman

DARCIE LITTLE BADGER HAS BEEN shaped by stories—the stories passed down to her through generations of family members, the stories she devoured as a fantasy-obsessed kid, the stories she now writes in books for young adults. And, of course, the story that gave her her name. She was born Darcie Erin Ryan—Little Badger coming, in the tradition of the Lipan Apache tribe, upon graduation from high school. "Badger" is an important figure in the tribe's origin narrative, which says that at first, the earth was empty—and then the creatures of the world below set out to explore it. Pausing on a park bench in Brooklyn, the author describes the significance of her namesake. "Badger is the animal person who went up to earth and was responsible enough to then go back down," she explains, "and say, 'Hey, y'all should go see this thing!' "

Exploring the mysteries of the planet—and the beings that may exist beyond our comprehension—is what anchors Little Badger's acclaimed young-adult fiction. Her books sink into the depths of humanity's darkest realities—gun violence, grief, our destruction of the planet—but also imagine the spirits, ghosts and animals that could exist alongside us. Her second young-adult novel, *A Snake Falls to Earth,* is a coming-of-age fantasy-thriller that flips between the perspective of an asexual teenage Lipan Apache girl and a cottonmouth snake. The book, to be published Nov. 23, was long-listed for this year's National Book Award for Young People's Literature. And like her debut, *Elatsoe,* which was published to fanfare in 2020, Little Badger's new genre-bending narrative draws on her heritage and the tradition of storytelling that has informed her worldview.

"For Native readers, especially Lipan Apache readers, I do hope that they are able to see more of their culture than they have in the past," says the 34-year-old author. "And for non-Native readers, I hope that they're able to connect to this character and learn a little bit."

THE LIPAN APACHE have long lived on the land that is now Texas. Although Little Badger was raised in several places around the world, moving because of her father's job, she considers Texas to be home. Growing up, she worked her way through the fantasy sections of each local library. When she was in the first grade, she wrote her first book, a 40-page mystery involving a murdered garden and opals in an attic. Her father, who was pursuing a Ph.D. in English at the time, helped her send the manuscript to a publisher. They responded with a kindly rejection letter. Her father had it framed. "He wanted me to see how far I would go someday," she says, adding, "It's good to learn as a writer you're going to deal with rejections."

NATIONAL BOOK AWARDS LONGLIST
Snake Falls to Earth
DARCIE LITTLE BADGER

A Snake Falls to Earth, *like* Elatsoe, *features a protagonist who is an asexual teen member of the Lipan Apache tribe*

She carried that lesson with her to college at Princeton. After trying two years in a row to be accepted into the school's creative-writing program, and being turned down both times, Little Badger pivoted to another subject that had piqued her interest: earth science.

An introduction to oceanography course left her wondering about all the parts of the world she never knew existed. On a research trip to Bermuda, Little Badger traveled on a small vessel to the deep ocean. She hopped in the water and swam, floating hundreds of meters above the ocean floor. "It was dark underneath my feet, and I felt myself being pulled in," she says, bright-eyed as she remembers how it felt. "Even though that was actually quite scary, it was also thrilling, because I realized I had no idea what was under my feet—and I really wanted to understand more." She went on to earn a Ph.D. in oceanography, then took a job editing earth science papers. In 2017, she started writing her first novel on the side.

Little Badger's fascination with the natural world, particularly her study of climate science, has proved pivotal in her fiction. It comes through clearly in *A Snake Falls to Earth,* part of which is set in an alternate version of near future Texas, where hurricanes and natural disasters are happening with an alarming and ever-increasing frequency. Any resemblance to the extreme weather that has grown more and more frequent in the real world is entirely deliberate. "It's a real concern for young people, who have unfortunately inherited this state of the world," Little Badger says.

She thinks a lot about young people and the struggles they face. "Teens are intelligent, they're emotionally complex, and they're experiencing many things for the first time," she says. She admits that writing adolescent characters gets more challenging with age, as she gets further and further from that period in

Little Badger also writes speculative fiction and contributed to the Marvel's Voices: Indigenous Voices *comic book*

JEREMY DENNIS FOR TIME

her own life. “I am not always up on the current terms,” she says, “but I hope my respect for them shines through.”

> **“I am not always up on the current terms, but I hope my respect for them shines through.”**
>
> **DARCIE LITTLE BADGER,** on writing for teens

Sometimes, young aspiring writers will tell Little Badger that they are in too much pain to write. The advice she gives them is not to force it, especially in the wake of everything they’ve had to deal with over the past few years.

But for Little Badger herself, the process of writing *A Snake Falls to Earth* helped her understand how writing can be a way to cope with trauma. Around the same time she sold *Elatsoe,* in late 2018, Little Badger learned that her father had been diagnosed with terminal mesothelioma. By March 2020, his condition had worsened. Little Badger quit her day job and moved temporarily to Connecticut to help care for him, alongside her mother and her brother. She started writing *A Snake Falls to Earth* while her father was in and out of the ICU. Working on the book, which is full of so many imaginative and fantastical elements, provided her with moments to escape the sadness that consumed her life.

Although her father didn’t read much of her favorite genre while she was growing up, he always encouraged her to explore the stories she wanted to tell. “I wanted to finish it in time for him to read it, but it didn’t work out that way,” she says. She finished a first draft of the book a few months after her father died. But he was able to see one of the first copies of *Elatsoe* in those final months—it was one of the last times she remembers him smiling.

DESPITE WRITING *A Snake Falls to Earth* in a period of deep personal pain, and amid a global pandemic, Little Badger unfolds a narrative that manages to be hopeful, fun and adventurous. It also takes cues from the Lipan Apache origin story.

Protagonist Nina, living in that grim near future version of Texas, is desperate to translate a story in a language she doesn’t quite understand—one passed down from her great-great-grandmother about animal people that live on earth. The story will be lost to time if she can’t figure out how to read it. And she’s certain that the little she understands of it is true—that animal people exist. Her theories are confirmed when she crosses paths with a snake person named Oli. Oli is from the Reflecting World, a magical land of spirits and monsters, and he has come to earth on a mission. His best friend is gravely ill, and he needs Nina’s help to save him.

Nina is relentlessly optimistic, despite it all. She never stops searching for answers about her great-great-grandmother’s story—there’s an underlying message of hope in her determination, her belief that she can preserve something sacred.

Little Badger remains optimistic too. “There’s this sense of almost fatalism, that the world is going to end,” she says. “The way I think about it is: maybe. But my responsibility is to fight for the best version of the future that I can.” ☐

7 Questions

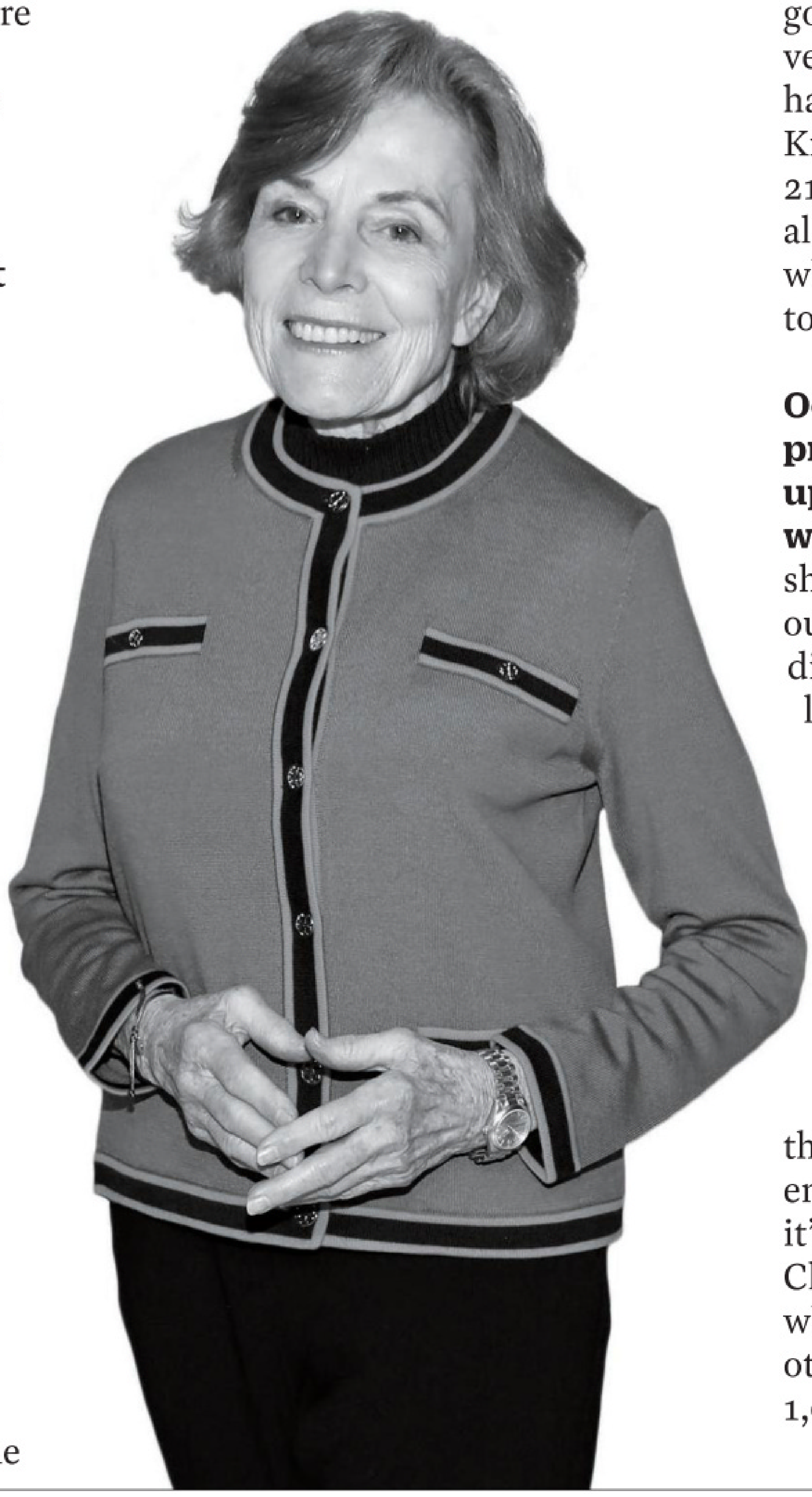
Sylvia Earle The marine biologist on her new book, how heavy fishing increases carbon dioxide and getting to know lobsters as individuals

You have written several books about the ocean. Why this one, *National Geographic Ocean: A Global Odyssey*, and why now? This book is my attempt to sum up what we now know about the ocean and make it accessible in digestible bites. If you've got 10 minutes, you can sit down and learn something, with beautiful images.

Why is the ocean so important? The ocean is where the action is: 97% of the earth's water is in the ocean. It's where 95% of the biosphere is. If I were an evil alien wishing to alter the nature of life on earth, I would change the temperature of the ocean, I would change the chemistry. That is exactly what we are doing: excess carbon dioxide in the atmosphere becomes excess carbon dioxide in the ocean that becomes carbonic acid. The ocean is becoming more acidic. That changes everything.

> *'THE OCEAN IS BECOMING MORE ACIDIC. THAT CHANGES EVERYTHING'*

What is the single most important thing we can do for the oceans today? Right now a disproportionate bite out of the ocean is being taken by a relatively small number of countries doing industrial fishing. We've got to get over this idea that wildlife from the ocean is essential for our food security. What we now are beginning to understand is the high cost of eating fish. What does it take to make a pound of tuna? A lot of halibut or cod. What makes the halibut? Smaller fish. What do they eat? Krill. Krill eat phytoplankton, zooplankton. Over the years, thousands of pounds of phytoplankton make a single pound of tuna. So that tuna is expensive in terms of the carbon that it has captured. The more fish we take out of the sea, the more carbon dioxide gets released into the atmosphere.



MONICA SCHIPPER—GETTY IMAGES

We were all awed by the relationship in the documentary *My Octopus Teacher*. Have you ever experienced something similar? I've had the privilege of living underwater on 10 different occasions. It has enabled me to get to know individual moray eels, individual groupers, even individual lobsters. They all have faces; they have attitudes. They have sensory systems much like our own. And yet we somehow harden ourselves to think they don't feel pain. We pride ourselves on being "humane," but it doesn't translate to the way we treat animals in the sea.

We've seen our hottest decade since recording began, rising emissions and major losses of coral reefs. What gives you hope? Yes, half the coral reefs are either gone or are in a state of sharp decline. The good news? We still got about half of them left. We can reverse to a very large extent the harm we have imposed, because now we know. Knowledge is the superpower of the 21st century. Even the smartest people alive when I was born did not know what 10-year-olds today have available to them. That's truly cause for hope.

Ocean advocates have set a goal to protect 30% of the ocean by 2030, up from less than 3% today. What will it take to get there? COVID-19 showed us we can change quickly when our lives are threatened. Climate is no different. Our very existence is on the line. The ocean is the blue heart of the planet; 30% by 2030 is a good start, but I say half, as soon as we can get there. How much of your heart do you want to protect?

What do you say to those experiencing climate anxiety? It would be so easy to say, "Why bother? The problems are so big that there's nothing I can do; I might as well enjoy myself for the time I've got." But it's only hopeless when you give up. Change happens because of individuals who team up with others or inspire others. And soon you've got 10 or 100 or 1,000, and then you've got a movement.

—ARYN BAKER

RACING FOR THE PLANET
THE OCEAN RACE

Brian Carlin

TIME
OFFICIAL PARTNER

THE OCEAN RACE

THE ULTIMATE RACE

We cannot live without a healthy ocean.

That's why The Ocean Race is giving our seas a voice at the landmark discussions about the future of the planet, including IUCN World Conservation Congress and the UN Climate Change Conference of the Parties (COP26).

Joining us in this are ministers, business leaders, royals, sailors and ocean lovers to call for world leaders to take more ambitious action to support a healthy and productive ocean for a net positive future.

Discover more at **www.theoceanrace.com/TIME**

It’s possible to tackle climate change.

Together, we can address the great challenge of our times.

To meet the 1.5°C Paris Agreement goal, global emissions need to be halved by 2030 and reach net-zero by mid-century. The complexities involved in achieving this are without historical precedent. Addressing climate change demands the immediate, large-scale implementation of existing energy-efficient technologies and a rapid transition toward a global energy ecosystem powered by renewables.

Yet we must not discount our capacity to address this challenge, to effect change through collaborative effort and the force of our collective will. No one individual or company has all the answers. But we all have a contribution to make in creating a world where society and all of life can continue to thrive. Together, it’s possible to tackle climate change.

Let’s write the future. Together.